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**National Highway  
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Washington, D.C. 20590

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[REDACTED] 1996

SCHOOL OF PUBLIC  
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AFFAIRS

[REDACTED]  
U.S. Department of Transportation  
National Highway Traffic Safety Administration  
National Center for Statistics and Analysis  
400 Seventh Street, S.W.  
Washington, D.C. 20590-0003

**SUBJECT: Submission of Special Crash Investigation Case Report**

Please find enclosed three (3) copies of On-Site Air Bag Investigation, Case Number 96-12. I have also enclosed one (1) set of color photographs, one (1) Summary form, and one (1) set of Air Bag (Accident and Person) coding forms.

Please contact me if you have any questions or comments regarding this investigative report.

[REDACTED]  
Associate Scientist

[REDACTED]  
Enclosures

cc: [REDACTED]

TRANSPORTATION  
RESEARCH CENTER

[REDACTED]  
[REDACTED]  
[REDACTED]

TRANSPORTATION RESEARCH CENTER

Indiana University  
Bloomington, Indiana 47403-1599

**ON-SITE AIR BAG INVESTIGATION**

CASE NO. - 96-12  
FLEET - PRIVATE VEHICLE  
LOCATION - NORTH CAROLINA  
ACCIDENT DATE - [REDACTED] 1996

Submitted By:

[REDACTED]

and

[REDACTED]

[REDACTED] 1996

Revised Submission:

[REDACTED] 1999

[REDACTED]

Prepared for:

U.S. Department of Transportation  
National Highway Traffic Safety Administration  
National Center for Statistics and Analysis  
Washington, D.C. 20590-0003

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The crash investigation process is an inexact science which requires that physical evidence such as skid marks, vehicular damage measurements, and occupant contact points be coupled with the investigator's expert knowledge and experience of vehicle dynamics and occupant kinematics in order to determine the pre-crash, crash, and post-crash movements of involved vehicles and occupants.

Because each crash is a unique sequence of events, generalized conclusions cannot be made concerning the crashworthiness performance of the involved vehicle(s) or their safety systems.

# Technical Report Documentation Page

1. Report No. 96-12	2. Government Accession No.	3. Recipient's Catalog No.	
4. Title and Subtitle On-Site Air Bag Investigation Private Vehicle Location - North Carolina		5. Report Date: [REDACTED] 1999	
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15. Supplementary Notes On-site air bag deployment investigation involving a 1994 Plymouth Voyager, 4-door, 7-passenger minivan, with manual belts and dual front air bags			
16. Abstract This report covers an on-site investigation of an air bag deployment crash that involved a 1994 Plymouth Voyager minivan (case vehicle) and a 1986 Chevrolet Celebrity (vehicle #2). This crash is of special interest because the case vehicle's front right passenger sustained a fatal, atlanto-occipital dislocation as a result of impacting her deploying, front right passenger, air bag. The case vehicle was traveling south in the southbound lane of a two-lane, undivided, city street. Vehicle #2 was traveling west in the westbound lane of an intersecting, two-lane, undivided, city street. The front of the case vehicle impacted the right front of vehicle #2, causing the case vehicle's driver and front right passenger supplemental restraint systems (air bags) to deploy. The case vehicle's driver (24-year-old female) was seated in an upright posture with her seat track located in its middle position, and the tilt steering wheel was located in its middle position. She was not wearing her available, active, three-point, lap and shoulder belt and sustained, according to her interview, a sore neck as a result of this crash. The front right passenger (4-year-old female) in the case vehicle was seated in an upright postured, with her seat track located in its middle position, and she was not wearing her available, active, three-point, lap and shoulder belt. She sustained, according to her medical records, a fatal atlanto-occipital dislocation and associated brain injuries which included: a concussion--comatose with no brain stem function, cerebellar and cerebral edema diffusely over her brain, intraventricular hemorrhage in her posterior lateral ventricles, and subarachnoid hemorrhage in the spaces of her posterior fossa and fourth ventricle. In addition, she sustained soft tissue abrasions and contusions. The case vehicle's second-seated passengers (3-year-old female--left, and 3-year-old male--middle) were in a nonadjustable seat and were seated in an upright posture in child booster seats, which were restrained by their available, active, three-point, lap and shoulder belts. According to the case vehicle's driver (i.e., mother), both had the shoulder portion of their belts behind their backs, and neither child was injured.			
17. Key Words Air Bag Deployment Motor Vehicle Traffic Crash Injury Severity		18. Distribution Statement General Public	
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# TRC/IU ON-SITE AIR BAG INVESTIGATION

TRC/IU CASE NO. 96-12

FLEET - PRIVATE VEHICLE  
LOCATION - NORTH CAROLINA

## SUMMARY

This report concerns a motor vehicle crash involving an air bag equipped 1994 Plymouth Voyager minivan (case vehicle), and a 1986 Chevrolet Celebrity, four-door sedan (vehicle #2), occurring in [REDACTED] 1996 at 11:42 a.m., on a city street. This crash is of special interest because the case vehicle's front right passenger sustained a fatal, atlanto-occipital dislocation as a result of impacting her deploying, front right passenger, air bag.

The case vehicle was traveling south in the southbound lane of a two-lane (i.e. one southbound lane with parking and one northbound lane with parking), undivided, city street when it impacted vehicle #2 which was traveling west in the westbound lane of an intersecting, two-lane, undivided, city street. After their initial impact, the case vehicle rotated approximately 30 degrees clockwise, vehicle #2 rotated approximately 50 degrees counterclockwise, and both vehicles traveled toward the southwest corner of the intersection. The case vehicle came to rest heading southwest, and vehicle #2 came to rest heading south-southwest.

The front of the case vehicle impacted the right front of vehicle #2. Subsequently, the front center of vehicle #2 impacted a wooden utility pole, and the case vehicle impacted the ground with its front air dam (i.e., scraped) and a street sign post with its front right bumper. CDCs were determined to be: **11-FDEW-1**, **12-FDLN-1**, and **12-FRLN-1** for the case vehicle and **02-RYEW-1** and **12-FCEN-1** for vehicle #2. The WinSMASH reconstruction program, damage only algorithm, was used on the highest severity impact to the case vehicle. The Total, Longitudinal, and Lateral Delta Vs are, respectively: 12.7 km.p.h. (7.9 m.p.h.), -11.9 km.p.h. (-7.4 m.p.h.), +4.3 km.p.h. (+2.7 m.p.h.).

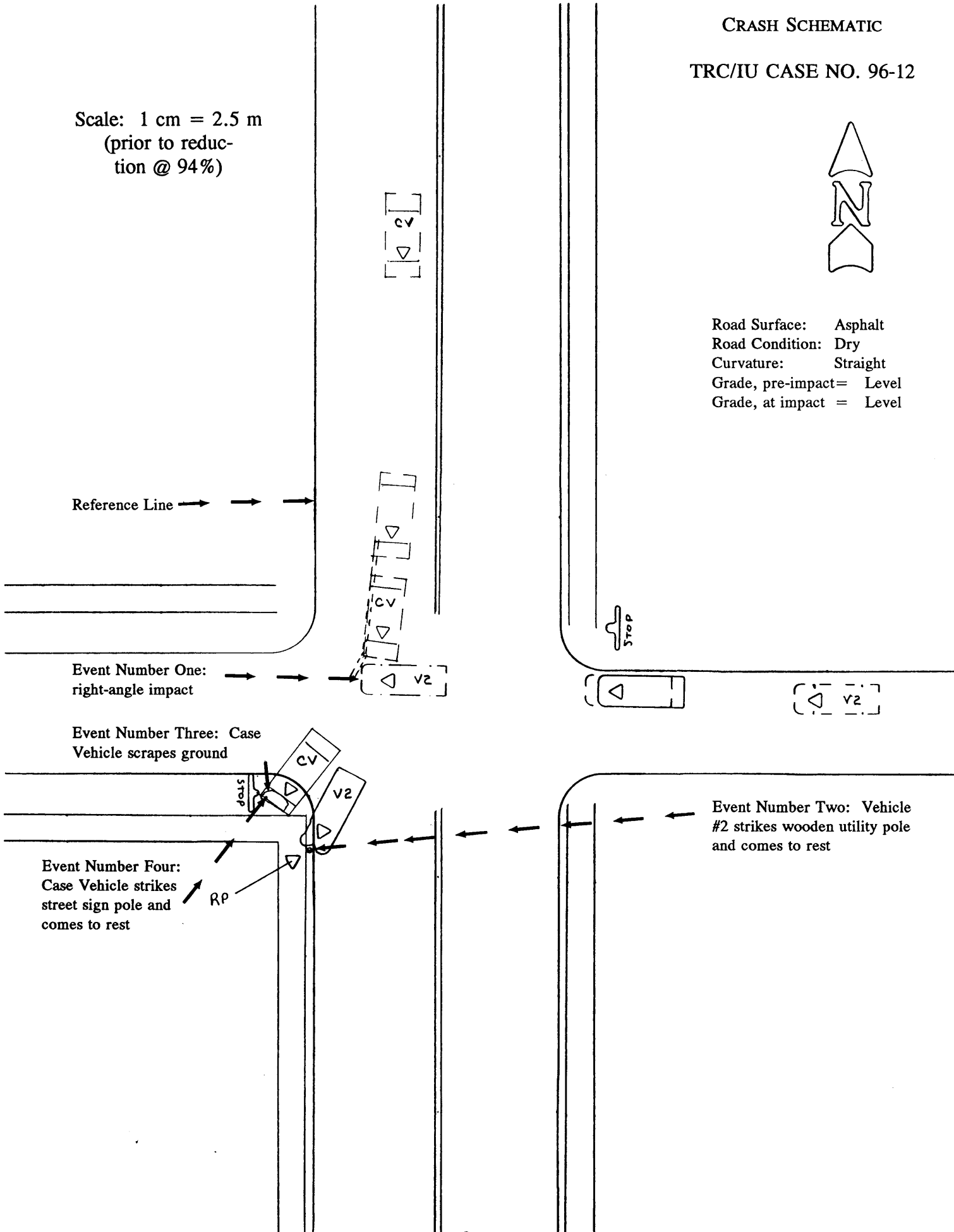
The 1994 Plymouth Voyager was equipped with both driver and front right passenger supplemental restraint systems (air bags) which deployed as a result of the frontal impact. The driver of the vehicle (24-year-old female) was seated in an upright posture, with her seat track located in its middle position, and the tilt steering wheel was located in its middle position. She was not wearing her available, active, three-point, lap and shoulder belt and sustained, according to her interview, a sore neck as a result of this crash. The front right passenger (4-year-old female) in the case vehicle was seated in an upright posture, with her seat track located in its middle position, and was not wearing her available, active, three-point, lap and shoulder belt. She sustained, according to her medical records, a fatal atlanto-occipital dislocation and associated brain injuries which included: a concussion--comatose with no brain stem function, cerebellar and cerebral edema diffusely over her brain, intraventricular hemorrhage in her posterior lateral ventricles, and subarachnoid hemorrhage in the spaces of her posterior fossa and fourth ventricle. In addition, she sustained a contusion to her posterior skull, abrasions to her right jaw area and whole anterior and lateral neck, and a contusion to her posterior neck. The second-seated passengers (3-year-old female--left, and 3-year-old male--middle) were in a nonadjustable seat and were seated upright in child booster seats which were restrained by their available, active, three-point, lap and shoulder belts. According to the case vehicle's driver, both children had the shoulder portion of their safety belts behind their backs, and neither child was injured. The driver (74-year-old female) of vehicle #2 was seated in an upright posture, with her seat track located in its forward-most position and the steering wheel was not adjustable. She was not wearing her available, active, three-point, lap and shoulder belt and sustained, according to her interview, moderate injuries which included: a fractured right clavicle, an injured right shoulder {joint}, and soft tissue contusions and lacerations.

CRASH SCHEMATIC  
TRC/IU CASE NO. 96-12



Road Surface: Asphalt  
Road Condition: Dry  
Curvature: Straight  
Grade, pre-impact = Level  
Grade, at impact = Level

Scale: 1 cm = 2.5 m  
(prior to reduction @ 94%)



# TRC/IU ON-SITE AIR BAG INVESTIGATION

TRC/IU CASE NO. 96-12

FLEET - PRIVATE VEHICLE  
LOCATION - NORTH CAROLINA

## CRASH DATA

Location/Street:	City Street
State:	North Carolina
Area/Type:	Urban, residential
Crash Date/Time:	██████ 1996 @ 11:42 a.m.
Investigating Police Agency:	City Police Department
Crash Type:	Minivan / Car - right angle
Occupant Injury Severity (air bag vehicle):	Atlanto-occipital dislocation (AIS-2) and probable transection of the spinal cord near the C <sub>1</sub> location

## AMBIENT CONDITIONS

Light Conditions:	Daylight
Weather Condition:	Clear, (no clouds)
Precipitation:	None
Road Surface:	Dry
Temperature:	55 degrees F at a nearby North Carolina airport

## ROADWAY

	<u>Case Vehicle</u>	<u>Vehicle #2</u>
Location:	City street	City street
Number of Travel Lanes:	Two lanes, undivided; one lane southbound with parking lane, one lane northbound with parking lane	Two lanes, undivided; one lane eastbound, one lane westbound
Width:	6.9 meters (22.6 feet) for travel and parking lane	2.9 meters (9.5 feet)



## ROADWAY (CONTINUED)

	<u>Case Vehicle</u>	<u>Vehicle #2</u>
Surface Type:	Bituminous	Bituminous
Median:	None	None
Shoulders:	Improved, rough asphalt pavement and sidewalk	Unimproved, grass
Vertical alignment:	Level	Level
Horizontal alignment:	Straight	Straight
Estimated Coefficient of Friction:	.75	.75
Traffic Density:	Light	Light

## TRAFFIC CONTROLS

	<u>Case Vehicle</u>	<u>Vehicle #2</u>
Signals:	None	None
Signs:	None	Regulatory STOP and SPEED LIMIT signs
Markings:	Double solid yellow center lines and faded white edge line along west side of roadway	Faded white STOP bar at Stop sign and faded double solid yellow center-lines
Speed Limit:	56 km.p.h. (35 m.p.h.)	56 km.p.h. (35 m.p.h.)

## VEHICLES

	<u>Case Vehicle</u>	<u>Vehicle #2</u>
Year:	1994	1986
Make:	Plymouth	Chevrolet
Model:	Voyager	Celebrity
Body Type:	4-door minivan, 7-passengers	4-door sedan, 6-passengers
V.I.N.	2P4GH2538RR-----	1G1AW19R3G6-----
Color:	Blue	Gray
Mileage:	94,002 km (58,410 mi)	155,292 km (96,494 mi)

## VEHICLES (CONTINUED)

	<u>Case Vehicle</u>	<u>Vehicle #2</u>
Engine:	3.0 liters, V-6, MPI	2.5 liters, I-4, EFI
Transmission:	4-Speed automatic	3-speed automatic
Steering:	Power-assisted, rack-and-pinion	Power-assisted, rack-and-pinion
Brakes:	Power-assisted, front disc, rear drum	Power-assisted, front disc, rear drum
Padding:	Steering wheel and hub, dash, sun visors, "A"-pillars, side door surfaces	Steering wheel and hub, dash, sun visors, "A"-pillars, side door surfaces
Active Restraints:	3-point, manual, lap and shoulder belts in front, second, and rear outboard seating positions; lap belt only at rear center seating positions	3-point, manual, lap and shoulder belts in front outboard seating positions; lap belt only in center front and rear seating positions
Passive Restraints:	Factory installed driver and front right passenger supplemental restraint systems (air bags)	Not equipped
Defects:	None	None
Fleet:	Private vehicle	Private vehicle
Tow status:	Towed due to damage	Towed due to damage

## VEHICLE DAMAGE

<u>EXTERIOR</u>	<u>Case Vehicle</u>	<u>Vehicle #2</u>
<u>Deployment Impact</u>		
Event number:	First	First
Object Struck:	Vehicle #2	Case Vehicle
Damage location		
Damaged Plane:		
Vertical Location	Front	Right
On Plane:		
Direct Begins:	Bumper and grille Front left bumper corner and goes across to front right bumper corner	Mid-door Right front bumper corner and rearward, [i.e., 186 cm ( 73.2 in) forward of right rear axle]

## VEHICLE DAMAGE (CONTINUED)

EXTERIOR (Continued)Case VehicleVehicle #2Deployment Impact (Continued)

Length Direct:	153 cm ( 60.2 in)	154 cm ( 60.6 in)
Field L:	154 cm ( 60.6 in)	199 cm ( 78.3 in)
C <sub>1</sub> :	19 cm ( 7.5 in)	0 cm ( 0.0 in)
C <sub>2</sub> :	10 cm ( 3.9 in)	3 cm ( 1.2 in)
C <sub>3</sub> :	9 cm ( 3.5 in)	11 cm ( 4.3 in)
C <sub>4</sub> :	8 cm ( 3.1 in)	6 cm ( 2.4 in)
C <sub>5</sub> :	4 cm ( 1.6 in)	6 cm ( 2.4 in)
C <sub>6</sub> :	0 cm ( 0.0 in)	0 cm ( 0.0 in)
Direct D:	0 cm ( 0.0 in)	+126 cm (+49.6 in)
Field L D:	0 cm ( 0.0 in)	+131 cm (+51.6 in)
Maximum Crush:	20 cm ( 7.9 in)	11 cm ( 4.3 in)
Location:	Near C <sub>1</sub>	C <sub>3</sub>
CDC:	11-FDEW-1 (-20)	02-RYEW-2 (+70)
Damaged Components:	Bumper, grille, left head-light assembly, hood, right parking lamp, left and right front fenders	Right front fender, right front wheel and assembly, and right front door

Nondeployment ImpactsCase Vehicle's FirstCase Vehicle's Second

Event number:	Third	Four
Object Struck:	Ground	Street sign post
Damage location		
Damaged Plane:	Front	Front
Vertical Location		
On Plane:	Air dam	Bumper
Direct Begins:	Bumper corner to bumper corner	35 cm ( 13.8 in) right of center
Length Direct:	Not applicable	9 cm ( 3.5 in)
Field L:	Not applicable	9 cm ( 3.5 in)
C <sub>1</sub> :	Not applicable	Not applicable
C <sub>2</sub> :	Not applicable	Not applicable
C <sub>3</sub> :	Not applicable	Not applicable
C <sub>4</sub> :	Not applicable	Not applicable
C <sub>5</sub> :	Not applicable	Not applicable
C <sub>6</sub> :	Not applicable	Not applicable
D:	Not applicable	Not applicable
Maximum Crush:	Not applicable	Not applicable
Location:	Not applicable	Not applicable
CDC:	12-FDLN-1 (00)	12-FRLN-1 (00)
Damaged Components:	Front air dam	Front bumper

# VEHICLE DAMAGE (CONTINUED)

## EXTERIOR (Continued)

## Vehicle #2's

### Nondeployment Impacts (Continued)

Event number:	Two
Object Struck:	Wooden utility pole
Damage location	
Damaged Plane:	Front
Vertical Location	
On Plane:	Bumper
Direct Begins:	7 cm ( 2.8 in) right of center
Length Direct:	13 cm ( 5.1 in)
Field L:	144 cm ( 56.7 in)
C <sub>1</sub> :	0 cm ( 0.0 in)
C <sub>2</sub> :	2 cm ( 0.8 in)
C <sub>3</sub> :	12 cm ( 4.7 in)
C <sub>4</sub> :	18 cm ( 7.1 in)
C <sub>5</sub> :	2 cm ( 0.8 in)
C <sub>6</sub> :	0 cm ( 0.0 in)
D:	+14 cm ( +5.5 in)
Maximum Crush:	23 cm ( 9.1 in)
Location:	Between C <sub>3</sub> and C <sub>4</sub>

CDC: 12-FCEN-1 (00)

Damaged Components: Front bumper and grille

## INTERIOR

## Case Vehicle

## Vehicle #2

Damaged Components:	Windshield and driver and front right passenger air bag modules	Windshield and right dash
Other Evidence of Occupant Contact:	Right front side rail and right "B"-pillar	Glove box
Manual Restraint System Failures:	None	None
Seat Performance Failures:	None	None

## REPAIR

Cost Estimate:	Totaled	Totaled
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## VEHICLE VELOCITY ESTIMATES

<u>Highest Delta "V"</u>	<u>Case Vehicle</u>	<u>Vehicle #2</u>
Reconstruction Program:	WinSMASH	WinSMASH
Program Algorithm:	Damage only	Damage only
Travel Speed:	48 km.p.h. ( 30 m.p.h.)	16 km.p.h. ( 10 m.p.h.)
Total Delta "V":	13 km.p.h. ( 8 m.p.h.)	17 km.p.h. ( 11 m.p.h.)
Longitudinal Delta "V":	-12 km.p.h. ( -7 m.p.h.)	-6 km.p.h. ( -4 m.p.h.)
Lateral Delta "V":	+4 km.p.h. ( +3 m.p.h.)	-16 km.p.h. (-10 m.p.h.)
Barrier Equivalent:	16 km.p.h. ( 10 m.p.h.)	12 km.p.h. ( 8 m.p.h.)

## COLLISION SEQUENCE

**PRE-CRASH:** According to the Police Crash Report and the case vehicle's driver, the case vehicle (Voyager) was traveling south in the southbound lane of a two-lane, undivided, city street and was attempting to continue in its southward direction of travel (i.e. there was one southbound lane with parking and one northbound lane with parking). Vehicle #2 was traveling west in the westbound lane of an intersecting, two-lane, undivided, city street and was attempting to cross through the intersection. The case vehicle's driver attempted to avoid the crash by braking (with lock-up) and steering to her right. As a result of her attempted avoidance maneuvers, the case vehicle veered to the right and deposited, according to the scene inspection, 6.3 meters (20.8 feet) of skid marks prior to impact. According to the driver of vehicle #2, she made no pre-crash avoidance maneuvers. Vehicle #2 continued straight ahead prior to impact. The crash occurred in the northeast quadrant of the four-leg intersection.

**CRASH:** The front of the case vehicle impacted the right front side of vehicle #2 causing the driver and front right passenger supplemental restraint systems (air bags) to deploy. After their initial impact, the case vehicle rotated approximately 30 degrees clockwise, vehicle #2 rotated approximately 50 degrees counterclockwise, and both vehicles traveled toward the southwest corner of the intersection. Vehicle #2 travelled south-southwestward approximately 7 meters (23 feet) and impacted a wooden utility pole with its front center. The case vehicle travelled southwestward approximately 7 meters (23 feet) and impacted (scraped) the ground with its front air dam prior to impacting a street sign post with its front right. Based on the Police Crash Report and the on-scene police photographs (see **SELECTED PHOTOGRAPHS #05, #07, and #19**), the case vehicle came to rest heading southwest at the point of impact with the street sign post. Vehicle #2 came to rest against the wooden utility pole heading south-southwest.

## COLLISION SEQUENCE (CONTINUED)

## POST-CRASH:

**Occupants:** The driver of the case vehicle remained inside the vehicle at final rest. She was conscious and was able to exit the case vehicle without assistance. The front right passenger remained inside the vehicle at final rest. She was unconscious and was unable to exit the case vehicle because of her injuries. Both second-seated passengers remained inside the case vehicle at final rest, and were both conscious and able to exit the case vehicle with some assistance (i.e., assistance was required because of their age).

According to the case vehicle's driver, she was not using her available, active, three-point, lap and shoulder belt. Based on the preponderance of the physical evidence found on the windshield, front right passenger air bag, and right front side rail, the front right passenger was also not restrained. According to the Police Crash Report and the case vehicle's driver, both second-seated passengers were using their available, active, three-point lap and shoulder belts in conjunction with their child safety seats. The case vehicle's driver indicated that her second-seated children were seated in booster seats and that the shoulder portion of their safety belts was behind their backs, because the belts "struck" the children on their necks.

According to the Police Crash Report and the driver of vehicle #2, she remained inside the vehicle at final rest. She was conscious but was not able, because of her injuries, to exit her vehicle without assistance. Vehicle #2's driver was not using her available, active, three-point, lap and shoulder belt.

**Police:** The investigating police agency was notified of the crash and arrived on-scene soon after. Traffic control procedures were established and emergency medical and towing services were called to assist.

**Rescue:** The case vehicle's driver accompanied the front right passenger (i.e., her daughter) to the hospital but did not receive medical treatment. The driver, subsequently (i.e., two days post-crash), sought medical treatment for a sore neck from a private physician. Based on the front right passenger's medical records, the front right passenger was transported by ambulance to a medical facility. She was stabilized at the initial medical facility and then transferred by life flight helicopter to a trauma center and hospitalized. The front right occupant died in the hospital approximately 25 hours post-crash. According to the front right passenger's medical records, she sustained a fatal atlanto-occipital dislocation and associated brain injuries. The brain injuries included: a concussion--comatose with no brain stem function, cerebellar and cerebral edema diffusely over her brain, intraventricular hemorrhage in her posterior lateral ventricles, and sub-arachnoid hemorrhage in the spaces of her posterior fossa and fourth ventricle. In addition, she sustained a contusion to her posterior skull, abrasions to her right jaw area and whole anterior and lateral neck, and a contusion to her posterior neck. According to the case vehicle's driver, the second-seated passengers were not transported, did not require medical treatment, and were not injured.

## COLLISION SEQUENCE (CONTINUED)

## Post-Crash: Rescue: (Continued)

According to the Police Crash Report and vehicle #2's driver, she was transported by ambulance to a medical facility where she was treated and released. According to the driver of vehicle #2, she sustained a fractured right clavicle, an injured right shoulder {joint}, and soft tissue contusions and lacerations.

Removal: Following the police investigation, both the case vehicle and vehicle #2 were towed from the scene.

## HUMAN FACTORS/OCCUPANT DATA

<u>DRIVERS:</u>	<u>Case Vehicle</u>	<u>Vehicle #2</u>
Age:	24-year-old	74-year-old
Sex:	Female	Female
Height:	168 cm (66 in)	160 cm (63 in)
Weight:	68 kg (150 lbs)	78 kg (172 lbs)
Occupation:	Interior decorator	Retired/homemaker
Active Restraint System/Usage:	Three-point lap and shoulder/Not used	Three-point lap and shoulder/Not used
Usage Source:	Interviewee	Interviewee and Police Crash Report
Passive Restraint System/Usage:	Factory installed air bag/air bag deployed	Not equipped
Usage Source:	Vehicle inspection and Interviewee	Not applicable
Eye glasses/contacts:	Sunglasses	Not applicable
Vehicle Familiarity:	32 months, and approximately 26,433 km (16,425 mi) per year	4-5 years, and approximately 8,047 km (5,000 mi) per year
Route Familiarity:	Three times a week	Driven daily
Trip Plan:	Home to personal business (i.e., pay a bill)	Personal Business to personal business (i.e., Running errands)
Manner of Leaving Scene:	Ambulance	Ambulance
Type of Medical Treatment:	Treatment later (i.e., saw physician two days post-crash)	Treated and released

## HUMAN FACTORS/OCCUPANT DATA (CONTINUED)

<u>CASE VEHICLE PASSENGERS:</u>	<u>Front Right Passenger</u>	<u>Second-Seated Left Passenger</u>	<u>Second-Seated Middle Passenger</u>
Age:	4-year-old	3-year-old	3-year-old
Sex:	Female	Female	Male
Height:	109 cm (43 in)	94 cm (37 in)	99 cm (39 in)
Weight:	20 kg (45 lbs)	12 kg (27 lbs)	16 kg (35 lbs)
Active Restraint System/Usage:	Three-point lap and shoulder/Not used	Three-point lap and shoulder belt/Used with child safety seat; however, shoulder portion of belt was behind child	Three-point lap and shoulder belt/Used with child safety seat; however, shoulder portion of belt was behind child
Usage Source:	Vehicle inspection, and Police Crash Report	Interviewee	Interviewee
Passive Restraint System/Usage:	Front right air bag/deployed	Not equipped	Not equipped
Usage Source:	Vehicle inspection, interviewee, and Police Crash Report	Not applicable	Not applicable
Eye glasses/contacts:	Sunglasses	Not applicable	Not applicable
Manner of Leaving Scene:	Ambulance	Went with family member	Went with family member
Type of Medical Treatment:	Hospitalized, died 25 hours post-crash	None	None

CASE VEHICLE DRIVER INJURIES<sup>1</sup>

<u>Description of Injury</u>	<u>A.I.S.</u>	<u>Source of Data</u>	<u>Injury Mechanism</u>	<u>Certainty</u>
Unknown if injured <sup>1</sup>	9	7	Unknown	{Unknown}

<sup>1</sup> The case vehicle's driver indicated in her interview that her neck was "*really sore*", but she did not use any of the "key" words that this contractor would associate with a cervical strain. She sought medical attention two days post-crash; however, her attorney, who limited this contractor's access to the driver, did not acquire her medical records.



CASE VEHICLE FRONT RIGHT PASSENGER INJURIES<sup>2,3,4,5</sup>

<u>Description of Injury</u>	<u>A.I.S.</u>	<u>Source of Data</u>	<u>Injury Mechanism</u>	<u>Certainty</u>
Atlanto-occipital dislocation <sup>2</sup>	650208.2,6	2	Air bag, front right passenger's	{Certain}
Concussion, comatose, pupils fixed and dilated, GCS=3, flaccid x 4 extremities, no brain stem function	160824.5,0	2	Air bag, front right passenger's	{Certain}
Cerebellar edema	140454.3,6	3	Air bag front right passenger's	{Certain}
Cerebral edema diffusely over both hemispheres	140668.3,3 <sup>3</sup>	3	Air bag, front right passenger's	{Certain}
Intraventricular hemorrhage in posterior lateral ventricles	140678.4,3 <sup>3</sup>	3	Air bag, front right passenger's	{Certain}
Subarachnoid hemorrhage in spaces of posterior fossa and fourth ventricle	140884.3,6 <sup>4</sup>	3	Air bag, front right passenger's	{Certain}
Contusion posterior skull	190402.1,6	2	"B"-pillar, right side	{Probable}
Abrasion right jaw area	290202.1,1	2	Front right air bag module's cover flap <sup>5</sup>	{Possible}
Abrasion whole anterior and lateral neck area	390202.1,0	2	Air bag, front right passenger's <sup>5</sup>	{Certain}
Contusion posterior neck	390402.1,6	2	"B"-pillar, right side	{Probable}

## CASE VEHICLE SECOND-SEATED LEFT PASSENGER INJURIES

<u>Description of Injury</u>	<u>A.I.S.</u>	<u>Source of Data</u>	<u>Injury Mechanism</u>	<u>Certainty</u>
Not injured	0	7	Not applicable	Not applicable

<sup>2</sup> According to the medical examiner (i.e., a noninvasive examination signed by an M.D. and documented on a medical examiner's record), this occupant's spinal cord was transected near the C<sub>1</sub> location; however, this injury is not listed because no autopsy was done (i.e., this allegation is not medically substantiated and is at best a probable lesion). In addition, the extent of the dislocation is described as follows: the foramen magnum is approximately 4 centimeters (1.6 inches) above and 4 centimeters (1.6 inches) anterior to its expected location.

<sup>3</sup> Strictly according to NASS CDS Injury Coding protocol, the Aspect "bilateral" is not allowed for the purpose of combining these lesions when they involve both cerebral hemispheres; each "lesion-hemisphere combination" should be coded separately. Bilateral is used here because the contact mechanism for each cerebral hemisphere is identical (i.e., the air bag).

<sup>4</sup> Strictly according to NASS CDS Injury Coding protocol, the valid Aspect codes for this listed injury are Right ("1") and Left ("2"). However, the actual medical injury description does not fit either of these two alternatives; therefore, the Aspect code Posterior ("6"), which is valid for other listed injuries, is used.

<sup>5</sup> In addition to the front right air bag, it is likely, based on the vehicle inspection, that the module's cover flap contacted this passenger's right jaw and/or neck area. The lack of specific medical detail pertaining to the occupant's soft tissue injuries precludes any certainty in this matter.

## CASE VEHICLE SECOND-SEATED MIDDLE PASSENGER INJURIES

<u>Description of Injury</u>	<u>A.I.S.</u>	<u>Source of Data</u>	<u>Injury Mechanism</u>	<u>Certainty</u>
Not injured	0	7	Not applicable	Not applicable

## VEHICLE #2 DRIVER INJURIES

<u>Description of Injury</u>	<u>A.I.S.</u>	<u>Source of Data</u>	<u>Injury Mechanism</u>	<u>Certainty</u>
Fracture right clavicle	752200.2,1	7	Right side door armrest	{Possible}
Injury right shoulder {joint}	751099.1,1	7	Right side door armrest	{Possible}
Laceration forehead	290600.1,7	7	Windshield	{Certain}
Contusion right breast	490402.1,1	7	Right dash and below	{Probable}
Contusion right shoulder	790402.1,1	7	Right side door armrest	{Possible}
Laceration right knee	890600.1,1	7	Right dash and below	{Probable}

## CASE VEHICLE DRIVER KINEMATICS

According to the case vehicle's driver, immediately prior to the crash she was normally postured (i.e., seated upright with her back against the seat back, her left foot on the floor, her right foot on the brake, and both hands on the steering wheel). According to the Case vehicle's driver, her seat track was in the middle position, and the tilt steering wheel was located in the middle position. According to the driver's interview, she was not wearing her available, active, three-point, lap and shoulder belt. According to the scene evidence and the vehicular damage<sup>6</sup> on both vehicles, the case vehicle's driver steered to the right and braked, attempting to avoid the crash. As a result of these avoidance maneuvers and the nonuse of her available safety belts, she most likely moved slightly forward and to her left just prior to impact.

Based on the vehicle and scene inspections, the case vehicle's primary impact, with vehicle #2, not only deployed the driver's side air bag, but thrust the driver forward and slightly upward. As a result of the impact, she directly contacted her deploying air bag (see **SELECTED PHOTOGRAPHS #40** and **#43** which show a red lipstick mark) causing the driver to move further upward and rearward. According to the Police Crash Report and the scene evidence, the case vehicle rotated approximately 30 degrees clockwise (to the west) after its impact with vehicle #2. As a result of the clockwise rotation, the driver most likely moved toward the right side of the case vehicle's driver seat.

<sup>6</sup> The case vehicle's primary contact area was at the front left corner; vehicle #2's primary damage occurred to its right front fender.

## CASE VEHICLE DRIVER KINEMATICS (CONTINUED)

According to the Police Crash Report and the scene evidence, the case vehicle continued in a southwesterly direction toward the southwest corner of the intersection. The case vehicle impacted, first the ground, and secondly a street sign post. These subsequent impacts most likely caused the driver to move back forward. The case vehicle came to rest on the southwest corner of the intersection, partially off the roadway, facing southwest against the sign post.

The case vehicle's driver most likely rebounded rearward after her vehicle's impact with the sign post. At final rest, the case vehicle's driver most likely remained primarily in her original seating position. Our inspection of the case vehicle showed that the driver's seat track was in the full rearward position with the seat back in the upright position. The windshield was not contacted by the driver nor was there any deformation to the steering wheel. The case vehicle's driver side supplemental restraint (air bag) appears to have worked as designed by preventing the driver from sustaining any serious injuries. According to her interview, she sustained only a sore neck as a result of this crash.

## CASE VEHICLE FRONT RIGHT PASSENGER KINEMATICS

According to the case vehicle's driver, prior to the crash the front right passenger (4-year-old female) was normally postured (i.e., seated upright with her back against the seat back, her feet hanging down, and her arms in her lap). According to the driver, the front right passenger's seat track was located in the middle position, but upon inspection, the seat track was found in the full rearward position. In this contractor's opinion, the seat track was most likely moved during this occupant's removal. According to the case vehicle's driver, she thought that her daughter (i.e., the front right passenger) was restrained by her safety belt. However, the driver indicated that only minutes prior to the crash her daughter "*had joked*" that if she didn't get her way (i.e., on some issue), she would take her seat belt off. Based on the vehicle inspection and the occupant's emergency room medical records, she was not wearing her available, active, three-point, lap and shoulder belt. The case vehicle's attempted avoidance maneuvers (i.e., braking and steering to the right) propelled the four-year-old [20 kilograms (45 pounds)] forward toward the dash and slightly to her left. In this contractor's opinion, the front right passenger was near the case vehicle's front right air bag module just prior to impact.

Based on the vehicle and scene inspections, the case vehicle's primary impact not only deployed the front right passenger air bag, but further thrust the front right passenger forward and slightly upward. At the time of the passenger air bag's deployment, the front right passenger was very near the air bag module. In this contractor's opinion, the front right passenger most likely contacted the passenger air bag module's cover flap<sup>7</sup>--see **SELECTED PHOTOGRAPHS #52** and **#53**, and then the deploying air bag--see **SELECTED PHOTOGRAPHS #47**, **#49**, and **#51** showing lots of skin transfers on upper right portion of the air bag. According to the contact evidence

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<sup>7</sup> There appears to be an oil smudge to right side of the cover flap and a skin transfer along its front right edge. According to the medical examiner's report, there was an abrasion to her right cheek and across the front of her neck from the left to the right. If the cover flap struck this occupant, then this contractor, based on our previous special crash investigations, expected to see identified a distinct abrasion and/or laceration at the site of contact. Unfortunately, the lack of detail in the available medical records precludes any certainty on our part concerning whether or not the cover flap actually struck this occupant. However, it must be kept in mind that the available medical records focused on this occupant's critical nature rather than discerning occupant contact mechanisms.

## CASE VEHICLE RIGHT FRONT PASSENGER KINEMATICS (CONTINUED)

found during the case vehicle's inspection and the medical description<sup>8</sup> of the resulting fatal<sup>9</sup>, atlanto-occipital dislocation that the front right passenger sustained, it appears that the contact with the air bag module's cover flap and the air bag itself pushed the occupant's head upwards and forward while the occupant's torso was being "*held-in-place*" or pushed initially backwards. In this contractor's opinion, the deploying air bag caused the child to brush the windshield<sup>10</sup> (i.e., an oil smear was identified--see **SELECTED PHOTOGRAPH #54**), prior to being thrown rearward and to the right<sup>11</sup>. During her rebound, the front right passenger contacted the right front roof side rail and "B"-pillar with the back of her head (oil smears) and neck. After contacting of the roof side rail and "B"-pillar, the front right child passenger most likely landed on her seat, and her head contacted the base of the seat back (i.e., skin and blood--see **SELECTED PHOTOGRAPH #60**).

The case vehicle's subsequent impacts with the ground and sign post then sent the child forward onto the floorboard where she came to rest. The child's final rest position was confirmed by statements on her medical records and a blood spot found on the front of the auxiliary glove box located underneath the front right passenger's seat; see **SELECTED PHOTOGRAPHS #61** and **#62**.

## CASE VEHICLE SECOND-SEATED LEFT PASSENGER KINEMATICS

According to the case vehicle's driver, the left second-seated passenger (3-year-old female) was sitting upright--in a nonadjustable seat<sup>12</sup>, with her back against the seat back, her feet hanging over the seat, and her hands on her lap eating popcorn. The child (i.e., her daughter) was seated in an unknown (i.e., Make/Model) child booster seat and was restrained by her available, active, three-point, lap and shoulder belt, which she was wearing in conjunction with the booster seat. In addition, she had the shoulder portion of her belt behind her back because the belt was, otherwise, against the child's face. As a result of the case vehicle's avoidance maneuvers, the child most likely moved slightly forward and to the left, loading the shield of her booster seat.

At impact the left second-seated passenger was thrown forward and slightly to the left, further loading the shield of her booster seat which was secured by her safety belt. A visual inspection of this occupant's "D"-ring showed no conclusive evidence of usage. According to occupant

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<sup>8</sup> According to the cervical spine x-ray (i.e., a cross table lateral view), the right front passenger's occiput (i.e., the foramen magnum) was displaced approximately 4 centimeters (1.6 inches) above and 4 centimeters (1.6 inches) anteriorly to its expected location on C<sub>1</sub>.

<sup>9</sup> The Medical Examiner indicated that the atlanto-occipital dislocation caused her spinal cord to be transected at the C<sub>1</sub> level; although this contractor believes that this assertion is "probably" true, this lesion is not coded because no invasive examination (i.e., autopsy) was performed. In this contractor's opinion, the likelihood of this injury is high and is consistent with the observed vital signs (i.e., no pulse, respirations, or blood pressure) since a laceration at the C<sub>1</sub> level (AIS=6) would sever her autonomic nervous system. In addition, the dislocation most likely caused the critical brain injuries that were verified by a CAT (computerized axial tomography) scan.

<sup>10</sup> The front right passenger most likely contacted the windshield with her forehead and/or frontal scalp as she was lifted up and over her deploying air bag; however, because no soft tissue injuries were identified in her medical records to either the upper portion of her face or scalp, it is unknown exactly what anatomical area contacted the windshield.

<sup>11</sup> The rightward rebound resulted from the case vehicle's clockwise rotation.

<sup>12</sup> The vehicle inspection showed that the case vehicle's second-seat had a nonadjustable seat track and seat back.

### CASE VEHICLE SECOND-SEATED LEFT PASSENGER KINEMATICS (CONTINUED)

kinematic principles, the child most likely move to the left as a result of the case vehicle's clockwise rotation.

The subsequent impacts with the ground and pole most likely caused the child to move forward. According to the Police Crash Report and the case vehicle's driver, this occupant sustained no injuries.

### CASE VEHICLE SECOND-SEATED MIDDLE PASSENGER KINEMATICS

According to the case vehicle's driver, the middle second-seated passenger (3-year-old male) was sitting upright--in a nonadjustable seat<sup>12</sup>, with his back against the seat back, his feet hanging over the seat, and his hands on his lap. The child (i.e., her relative) was seated in an unknown (i.e., Make/Model) child booster seat and was restrained by his available, active, three-point, lap and shoulder belt, which he was wearing in conjunction with the booster seat. In addition, he had the shoulder portion of his belt behind his back because the belt was, otherwise, against the child's face. As a result of the case vehicle's avoidance maneuvers, the child most likely moved slightly forward and to the left, loading the shield of his booster seat.

At impact the middle second-seated passenger was thrown forward and slightly to the left, further loading the shield of his booster seat which was secured by his safety belt. A visual inspection of this occupant's "D"-ring also showed no conclusive evidence of usage. According to occupant kinematic principles, the child most likely move to the left as a result of the case vehicle's clockwise rotation.

The subsequent impacts with the ground and pole most likely caused the child to move forward. According to the Police Crash Report and the case vehicle's driver, this occupant also sustained no injuries.

### AIR BAG SYSTEM

	<u>DRIVER AIR BAG</u>	<u>PASSENGER AIR BAG</u>
Air Bag Diameter (seam-to-seam, deflated):	Diameter: 63 cm (24.8 in)	Width: 48 cm (18.9 in) Height: 60 cm (23.6 in)
Number of Vent Holes:	Two	None
Vent Hole Diameter:	2.5 cm (1.0 in)	Not applicable
Vent Hole Clock Positions:	Approximately 11 and 1 o'clock	Not applicable

**AIR BAG SYSTEM (CONTINUED)**

	<b><u>DRIVER AIR BAG</u></b>	<b><u>PASSENGER AIR BAG</u></b>
Number of Air Bag Tethers:	None	Two, each 10 cm (4.0 in) wide
Number of Air Bag Module Cover Flaps:	Two	One
Upper Cover Flap Dimensions:	Width: 17 cm (6.7 in) Height: 6 cm (2.4 in)	Width: 33 cm (13.0 in) Height: 15 cm (5.9 in)
Lower Cover Flap Dimensions:	Width: 18 cm (7.1 in) Height: 7 cm (2.8 in)	Not applicable
Distance between Dash and Module's Cover Flap:	<b>Not applicable</b>	3.0 cm (1.2 in)
Generant Residue:	No unusual amount found	No unusual amount found

Appendix A:

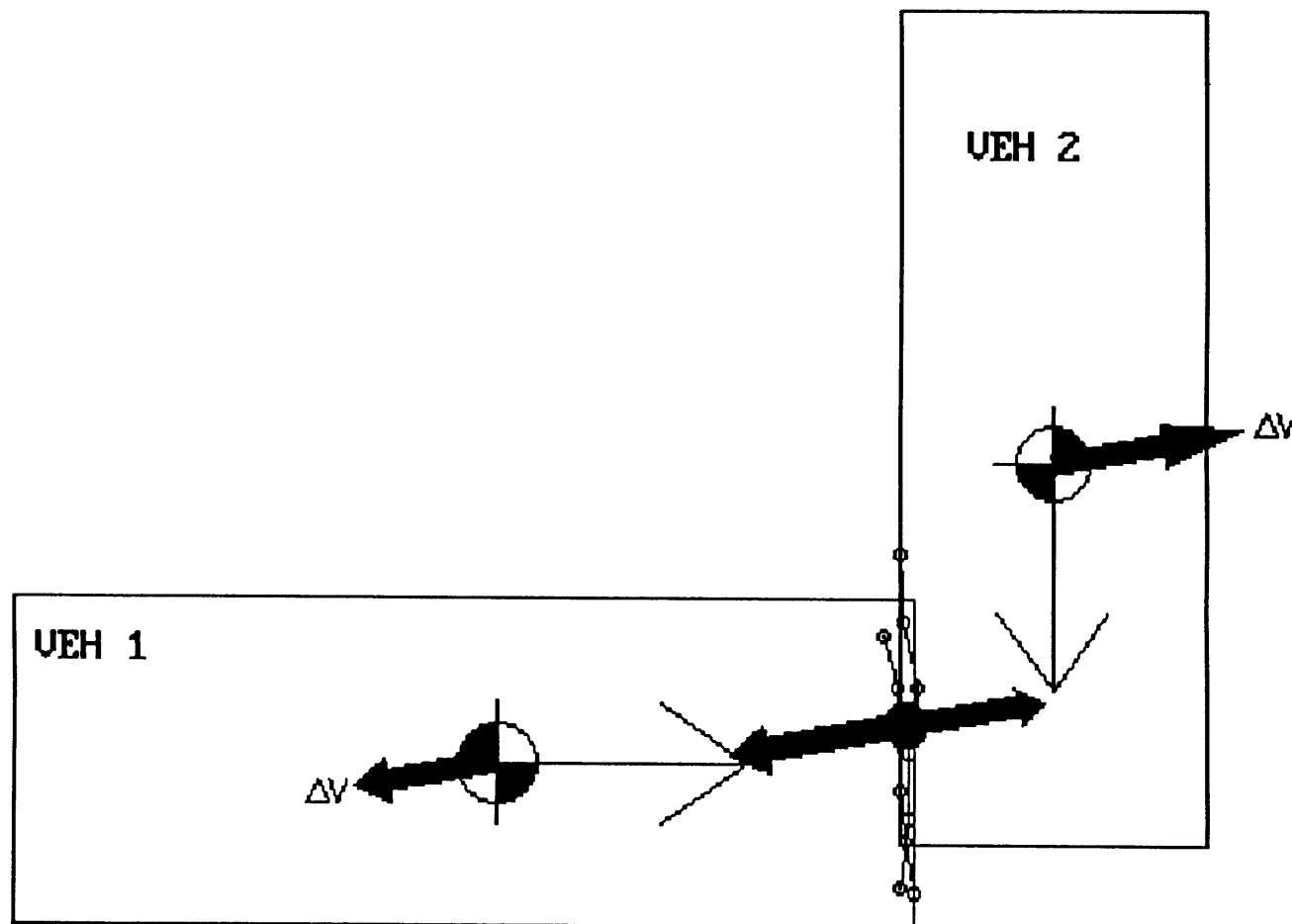
**WINSMASH  
(DAMAGE ONLY ALGORITHM):**

including

Barrier Equivalent Speeds

**SMASH**  
**(DAMAGE ONLY ALGORITHM**  
**-- INCLUDING**  
**BARRIER EQUIVALENT SPEEDS)**





EDCRASH  
At Impact

	Veh #1	Veh #2
Delta-U (km/h)		
(BASIS: Damage)		
X	-10.8	-2.6
Y	1.9	-14.7
Tot	11.0	14.9
PDOF	-10.0	80.0

UNITS: km/h,m,deg

(NO SCENE DATA)

# Summary of Results Using Damage

SCI 96-12 N.C.

## Speed Change (Damage)

### Vehicle #1

Total 11 km/h ( 7 mph)  
 Longitudinal -11 km/h ( -7 mph)  
 Latitudinal 2 km/h ( 1 mph)  
 PDOF Angle -10 ½  
 Energy Dissipated = 19954 Joules ( 14715 Ft-Lb)  
 Barrier Equivalent Speed = 16.8 km/h ( 10.4 mph)  
 Calculated using crush coefficients entered by the user.

### Vehicle #2

Total 15 km/h ( 9 mph)  
 Longitudinal -3 km/h ( -2 mph)  
 Latitudinal -15 km/h ( -9 mph)  
 PDOF Angle 80 ½  
 Energy Dissipated = 10917 Joules ( 8051 Ft-Lb)  
 Barrier Equivalent Speed = 10.5 km/h ( 6.5 mph)  
 Calculated using crush coefficients entered by the user.

## General Information

	Vehicle #1	Vehicle #2
	áááááááááááá	áááááááááááá
Year	1994	1986
Make	PLYMOUTH	CHEVROLET
Model	VOYAGER	CELEBRITY
CDC	12FDEW1	03RYEW2
Side Damaged	F	R
PDOF Angle	-10 ½	80 ½
Heading Angle	186 ½	270 ½

Calculation method: Vehicle's Crush Coeff.      Vehicle's Crush Coeff.

d0 crush coeff.	107.05 sqrt(N)	63.32 sqrt(N)
d1 crush coeff.	6.36 sqrt(N)/cm	7.50 sqrt(N)/cm

██████████, 1996

Page 2

### Damage Information

	Vehicle #1 áááááááááááá Yes	Vehicle #2 áááááááááááá Yes
Vehicle Damage Known		
Crush Length	154.0 cm ( 61 in)	199.0 cm ( 78 in)
C1	19.0 cm ( 7 in)	0.0 cm ( 0 in)
C2	10.0 cm ( 4 in)	3.0 cm ( 1 in)
C3	9.0 cm ( 4 in)	11.0 cm ( 4 in)
C4	8.0 cm ( 3 in)	6.0 cm ( 2 in)
C5	4.0 cm ( 2 in)	6.0 cm ( 2 in)
C6	0.0 cm ( 0 in)	0.0 cm ( 0 in)
D	0.0 cm ( 0 in)	154.0 cm ( 61 in)
D'	-22.9 cm ( -9 in)	157.1 cm ( 62 in)

### Vehicle Dimensions

	Vehicle #1 áááááááááááá	Vehicle #2 áááááááááááá
Length	452.0 cm ( 178 in)	478.0 cm ( 188 in)
Width	183.0 cm ( 72 in)	176.0 cm ( 69 in)
Wheelbase	285.0 cm ( 112 in)	266.0 cm ( 105 in)
Weight	1777 kgs ( 3918 lbs)	1310 kgs ( 2888 lbs)
CG to Front of Veh	251.0 cm ( 99 in)	228.1 cm ( 90 in)
Engine Displacement	3.0 liters	2.5 liters
Moment of Inertia	327992 kgs ( 29031 lbs)	270412 kgs ( 23935 lbs)
Vehicle Mass	1777 kgs ( 10.2 lb-s <sup>2</sup> /in)	1310 kgs ( 7.5 lb-s <sup>2</sup> /in)



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

## SMASH PROGRAM SUMMARY

(All Measurements in Metric)

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

### Identifying Title

10

Primary  
Sampling Unit

9612

Case No.-Stratum

01

Accident Event  
Sequence No.

1 1

Date (Month, day, year) of Run

### GENERAL INFORMATION

#### VEHICLE 1

NASS Vehicle Number

Year

Make

Model

Body Style

CDC

PDOF

Heading Angle

01  
1994

Plymouth

Voyager

VN

11 FDEW1

± 20°

± 186°

#### VEHICLE 2

NASS Vehicle Number

Year

Make

Model

Body Style

CDC

PDOF

Heading Angle

02  
1986

Chevrolet

Celebrity

4S

02 RYEW1

± 70°

± 270°

### VEHICLE SPECIFICATIONS

#### VEHICLE 1

Wheelbase

Overall Length

Overall Width

Weight

1649 + 117 + 11 = 1777 kg

Curb Occupant(s) Cargo

Engine Displacement

Drive System

Size

Stiffness

285 cm  
452 cm  
183 cm

3.0 L  
FWD  
4  
7

#### VEHICLE 2

Wheelbase

Overall Length

Overall Width

Weight

1232 + 78 + 0 = 1310 kg

Curb Occupant(s) Cargo

Engine Displacement

Drive System

Size

Stiffness

266 cm  
478 cm  
176 cm

2.5 L  
FWD  
3  
3

### DAMAGE INFORMATION

#### VEHICLE 1

Damage Known?

Damage Length

Damage Offset

Crush Depth:

Direct D: ± 0 cm

Field L D: ± 0 cm

Y  
154 cm  
± [shaded] cm  
C1 19 cm  
C2 10 cm  
C3 9 cm  
C4 8 cm  
C5 4 cm  
C6 0 cm

#### VEHICLE 2

Damage Known?

Damage Length

Damage Offset

Crush Depth:

Direct D: ± 125.5 cm

Field L D: ± 131 cm

Y  
199 cm  
± [shaded] cm  
C1 0 cm  
C2 3 cm  
C3 11 cm  
C4 6 cm  
C5 6 cm  
C6 0 cm

**SCENE INFORMATION**Rest and Impact Positions ☐ No ☐ Yes

## VEHICLE 1

Rest X . m

Position Y . m

Heading Angle °

Impact X . m

Position Y . m

Heading Angle °

Slip Angle (-180 to +180) °

## VEHICLE 2

Rest X . m

Position Y . m

Heading Angle °

Impact X . m

Position Y . m

Heading Angle °

Slip Angle (-180 to +180) °

**VEHICLE MOTION**Sustained Contact ☐ No ☐ Yes

## VEHICLE 1

Vehicle Rotation ☐ No ☐ YesRotation Stop Before Rest ☐ No ☐ Yes

End of Rotation X . m

Position Y . m

Heading Angle °

Curved Path ☐ No ☐ Yes

Point on Path

X . m Y . m

Rotation Direction ☐ None ☐ CW ☐ CCWRotation >360° ☐ No ☐ YesSustained Contact ☐ No ☐ Yes

## VEHICLE 2

Vehicle Rotation ☐ No ☐ YesRotation Stop Before Rest ☐ No ☐ Yes

End of Rotation X . m

Position Y . m

Heading Angle °

Curved Path ☐ No ☐ Yes

Point on Path

X . m Y . m

Rotation Direction ☐ None ☐ CW ☐ CCWRotation >360° ☐ No ☐ Yes**FRICTION INFORMATION**

Coefficient of Friction

Rolling Resistance Option

1

## Vehicle 1 Rolling Resistance

LF .

RF .

LR .

RR .

## Vehicle 2 Rolling Resistance

LF .

RF .

LR .

RR .

IF THIS COMMON IMPACT WAS WITH A CDS VEHICLE NOT IN TRANSPORT, FILL IN THE INFORMATION BELOW.

Model Year: \_\_\_\_\_

Make: \_\_\_\_\_

Model: \_\_\_\_\_

VIN: \_\_\_\_\_

The Weight, CDC, Scene Data and Damage Information for this vehicle should be recorded above.

**Complete and ATTACH the appropriate**

**damage sketch and dimensions to the form.**

## General Information

SCI96-012

	<u>Vehicle 1</u>	<u>Vehicle 2</u>
Year:	1994	1986
Make:	Plymouth	Chevrolet
Model:	Voyager	Celebrity
Body Style:	VN	4S
CDC:	11FDEW1	02RYEW1
Damaged Side:		
PDOF:	-20°	70°
Heading Angle:	186°	270°

## Vehicle Information

	<u>Vehicle 1</u>	<u>Vehicle 2</u>
Wheelbase:	285.0 cm	266.0 cm
Length:	452.0 cm	478.0 cm
Width:	183.0 cm	176.0 cm
Weight:	1777.0 kg	1310.0 kg
Center of Gravity:	251.0 cm	228.1 cm
Radius of Gyration:	135.6 cm	143.4 cm
D0:	109.7 sqrt(N)	63.3 sqrt(N)
D1:	8.5 sqrt(N)/cm	7.5 sqrt(N)/cm
Size Category:	4	3
Stiffness Category:	7	3

Vehicle 1: Used d0 and d1 values estimated from the vehicle size.  
Vehicle 2: Used d0 and d1 values estimated from the vehicle size.

## Damage Information

	<u>Vehicle 1</u>	<u>Vehicle 2</u>
Damage Length:	154.0 cm	199.0 cm
Damage Offset:	0.0 cm	125.5 cm
Field L - D:	0.0 cm	131.0 cm
C1:	19.0 cm	0.0 cm
C2:	10.0 cm	3.0 cm
C3:	9.0 cm	11.0 cm
C4:	8.0 cm	6.0 cm
C5:	4.0 cm	6.0 cm
C6:	0.0 cm	0.0 cm

## Summary of Results Using Damage

### Vehicle 1

	Speed Change (Damage)
Total:	12.7 km/h
Longitudinal:	-11.9 km/h
Latitudinal:	4.3 km/h
PDOF:	-20°

Energy Dissipated:	25,636 Joules
Barrier Equivalent Speed:	16.4 km/h
Moment Arm of Principle Force:	84.1 cm (CW)
Change in Angular Velocity:	0.9 deg/seconds

Used d0 and d1 values estimated from the vehicle size.

### Vehicle 2

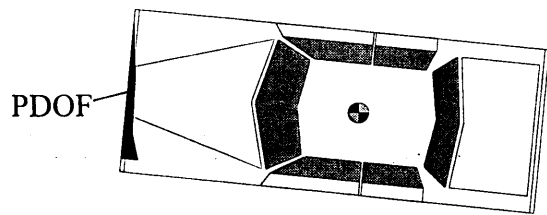
	Speed Change (Damage)
Total:	17.2 km/h
Longitudinal:	-5.9 km/h
Latitudinal:	-16.1 km/h
PDOF:	70°

Energy Dissipated:	10,914 Joules
Barrier Equivalent Speed:	12.3 km/h
Moment Arm of Principle Force:	-94.2 cm (CCW)
Change in Angular Velocity:	-1.3 deg/seconds

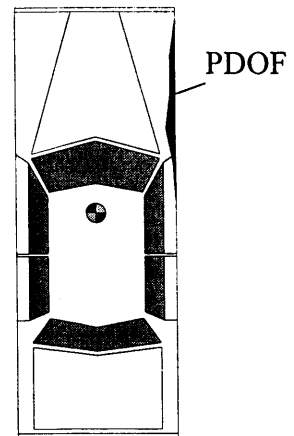
Used d0 and d1 values estimated from the vehicle size.



## Damage



1994 Plymouth Voyager VN



1986 Chevrolet Celebrity 4S

CASE NUMBER In 9612

**NO  
DATA**

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## Appendix B:

### **SELECTED PHOTOGRAPHS**

A total of ninety color copies of photographs are presented and referenced as Photograph #01 through Photograph #90. Photographs numbered #05, #07, #19, and #64 were taken and made available by the applicable city police department. The remainder of these photographs were taken by the Transportation Research Center.



# 01: Case Vehicle's southward travel path in southbound lane approximately 30 meters (98 feet) north of impact in intersection



# 02: Case Vehicle's southward travel path in southbound lane approximately 15 meters (49 feet) north of impact in intersection





# 03: Case Vehicle's southward travel path in southbound lane approximately 5 meters (16 feet) north of impact; NOTE: right front skidmark



# 04: Close-up of Case Vehicle's right front skidmark in southbound lane approximately 5 meters (16 feet) north of impact in intersection





# 05: On-scene view looking south-southwest showing both vehicles at final rest;  
NOTE: police officers are marking case vehicle's deflection point



# 06: Case Vehicle's southbound travel path at points of impact and maximum engagement with Vehicle #2; NOTE: case vehicle's deflection scuff





# 07: On-scene view looking south at case vehicle's final rest position against street sign post; NOTE: post had not been replaced at time of our scene inspection



# 08: Southwest view of Case Vehicle's final rest position; NOTE: Case Vehicle's air dam scraped ground and bumper impacted sign post before coming to rest



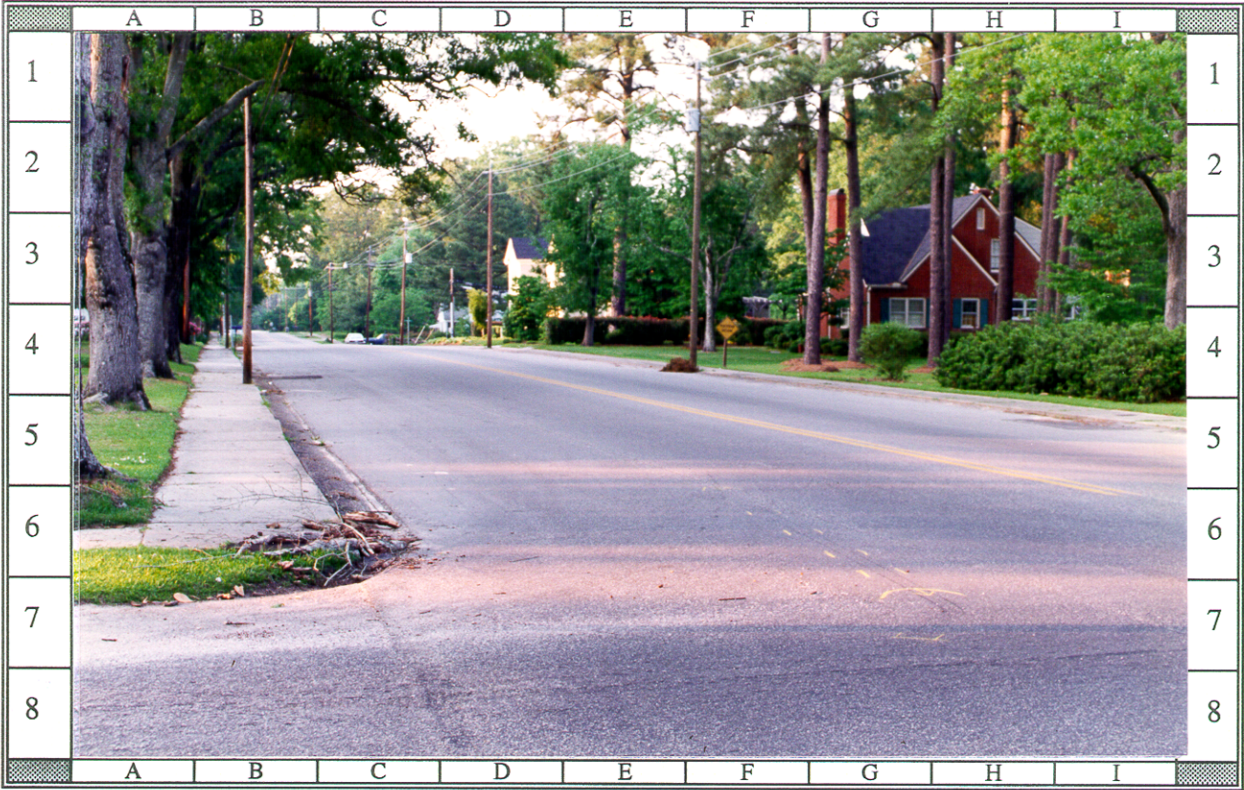


# 09: Close-up of southwest corner of intersection showing ground and cement base of sign post struck by Case Vehicle’s front



# 10: Northeastward view of Case Vehicle’s southwest travel path taken from beyond final rest area showing area of impact with Vehicle #2





# 11: North-northeastward view of Case Vehicle’s southbound travel path from just beyond area of impact; NOTE: skidmark and deflection point in intersection



# 12: Northward close-up of skidmark and deflection point deposited by Case Vehicle’s right front tire





# 13: Vehicle #2's westward travel path in westbound lane approximately 30 meters (98 feet) east of impact in intersection



# 14: Vehicle #2's westward travel path in westbound lane approximately 15 meters (49 feet) east of impact in intersection





# 15: Vehicle #2’s westward travel path in westbound lane approximately 5 meters (16 feet) east of impact in intersection with Case Vehicle

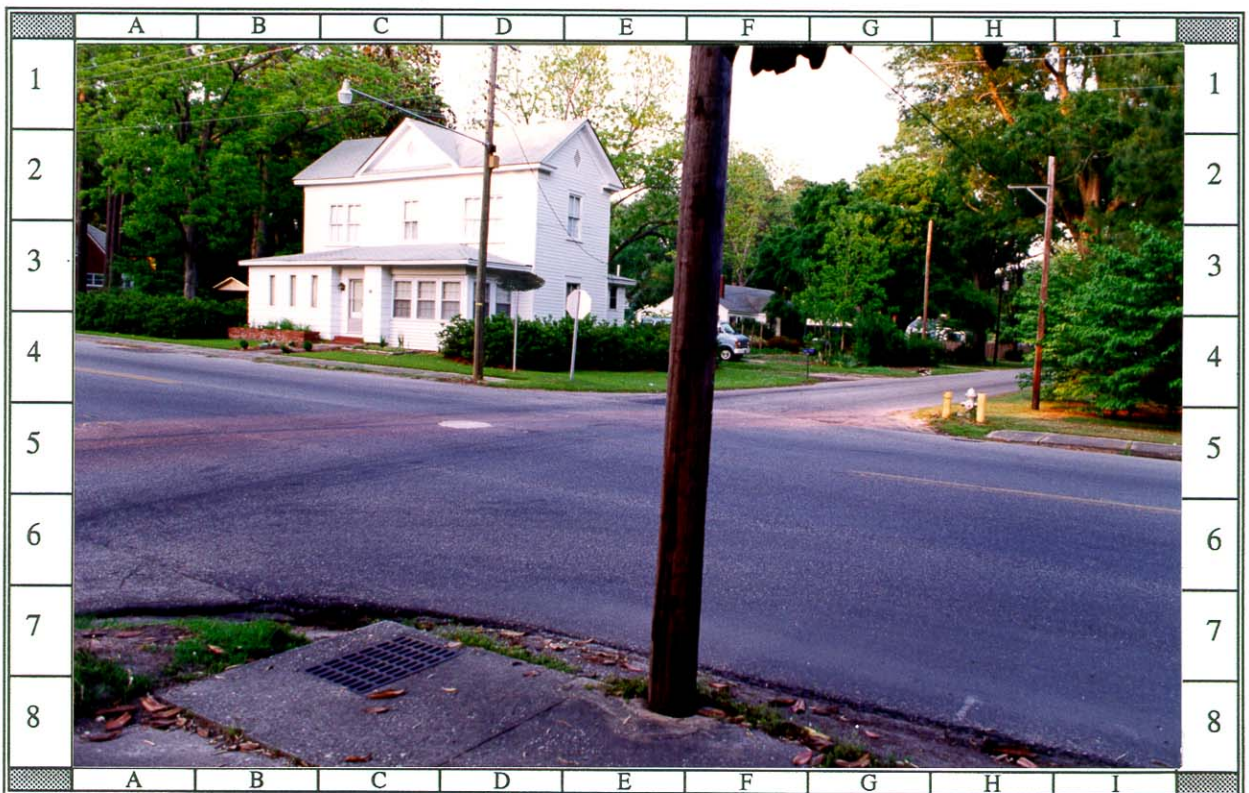


# 16: Vehicle #2’s southwestward travel path post-impact with Case Vehicle; NOTE: Vehicle #2 subsequently struck utility pole on southwest corner of intersection





# 17: Close-up view, looking southwestward, of utility pole on southwest corner of intersection struck by Vehicle #2



# 18: Northeastward view of Vehicle #2's post-impact trajectory taken from beyond final rest showing Vehicle #2's final rest position against utility pole





# 19: On-scene view, looking northeastward, showing Case Vehicle and Vehicle #2 at their respective final rest positions



# 20: Eastward view of Vehicle #2's westward travel path from just beyond area of impact; NOTE: Case Vehicle's deflection mark in foreground





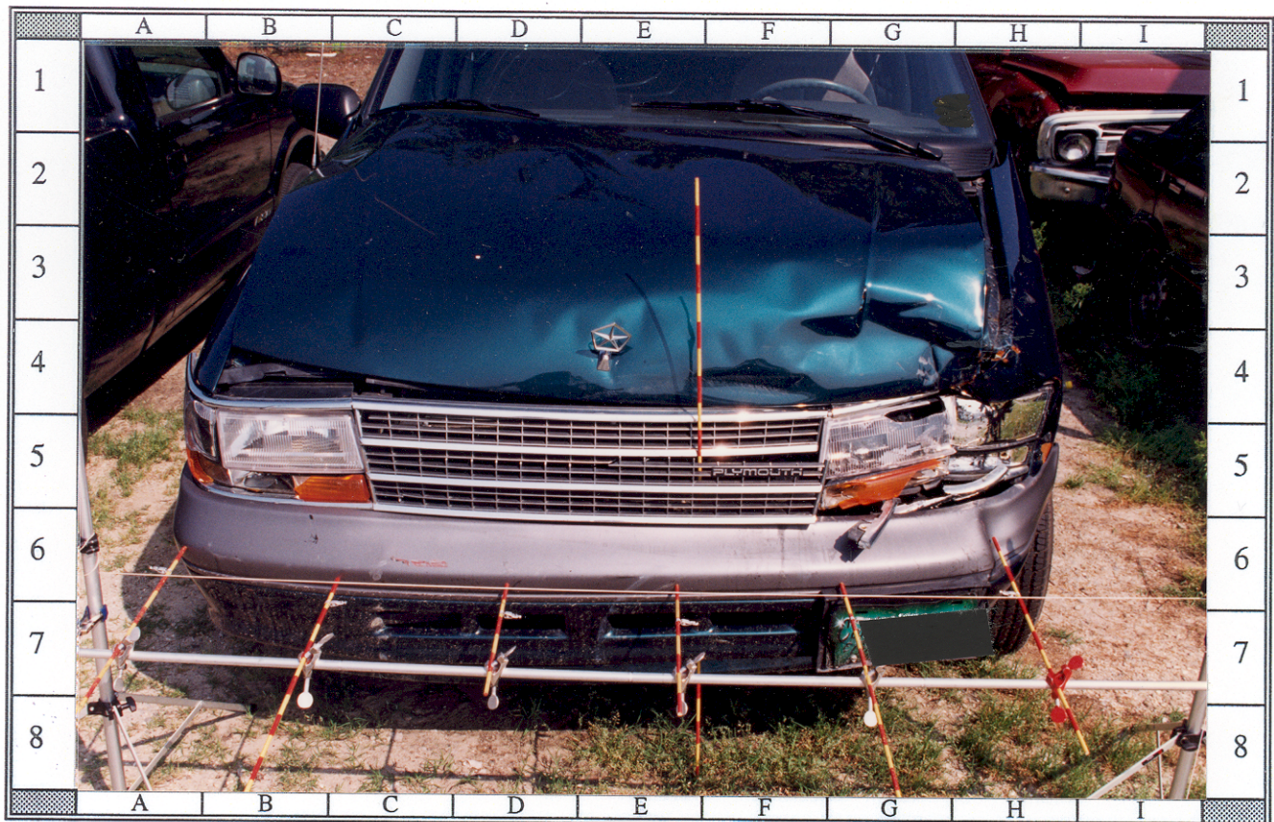
# 21: Case Vehicle's damaged front without contour gauge present; NOTE: shifting of front bumper to right



# 22: Case Vehicle's damaged front with contour gauge present; NOTE: direct damage extends across entire front

Case Vehicle: 1994 Plymouth Voyager, 5-Door Minivan, FWD, 7-Passenger, 3.0 L (181 in<sup>3</sup>) V-6 MPI





# 23: Close-up of Case Vehicle's front damage with contour gauge present; NOTE: sign post damage to bumper (cells C6--C7)



# 24: Close-up of sign post impact to Case Vehicle's front bumper; NOTE: reddish scuff is most likely from 1986 Chevrolet Celebrity





# 25: Closer-up view of sign post impact to Case Vehicle's bumper



# 26: Close-up of Case Vehicle's air dam which contacted ground just prior to Case Vehicle's impact against sign post

Case Vehicle: 1994 Plymouth Voyager, 5-Door Minivan, FWD, 7-Passenger, 3.0 L (181 in<sup>3</sup>) V-6 MPI





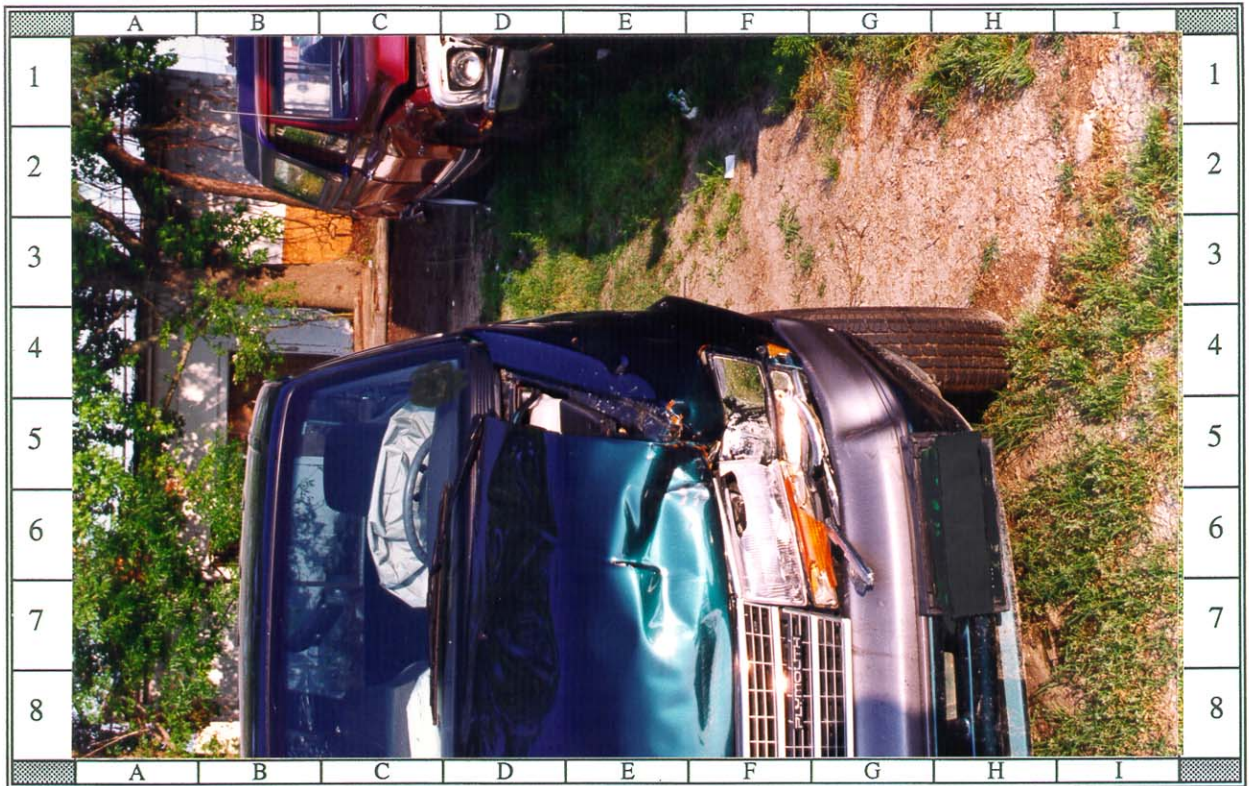
# 27: Overhead view of Case Vehicle's frontal damage; NOTE: contour gauge shows damage profile



# 28: Case Vehicle's damaged front viewed from approximately 45 degrees left of front with contour gauge present

Case Vehicle: 1994 Plymouth Voyager, 5-Door Minivan, FWD, 7-Passenger, 3.0 L (181 in<sup>3</sup>) V-6 MPI





# 29: Reference line view of Case Vehicle's left side from front showing front bumper's rightward shift



# 30: Reference line view of Case Vehicle's damaged front from left with contour gauge present

Case Vehicle: 1994 Plymouth Voyager, 5-Door Minivan, FWD, 7-Passenger, 3.0 L (181 in<sup>3</sup>) V-6 MPI





# 31: Case Vehicle's left fender, viewed from ~ 45 degrees left of back, showing induced damage and shifting which caused left front tire restriction

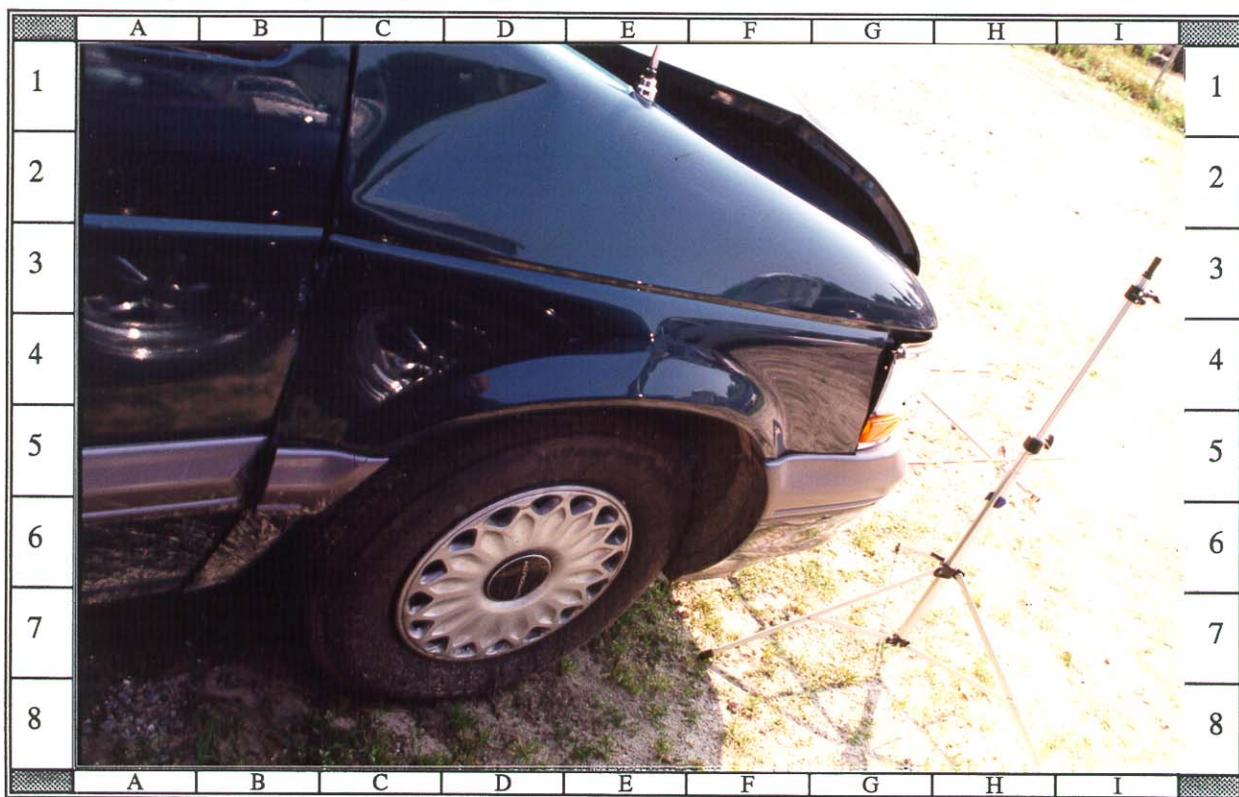


# 32: Case Vehicle's undamaged left side (except fender) and back viewed from approximately 30 degrees left of back





# 33: Case Vehicle's undamaged right side (except fender) and back viewed from approximately 30 degrees right of back



# 34: Case Vehicle's right fender, viewed from ~ 60 degrees right of back, showing induced damage from bumper shift which caused right front tire restriction

Case Vehicle: 1994 Plymouth Voyager, 5-Door Minivan, FWD, 7-Passenger, 3.0 L (181 in<sup>3</sup>) V-6 MPI





# 35: Reference line view of Case Vehicle's damaged front from right with contour gauge present



# 36: Case Vehicle's damaged front viewed from approximately 30 degrees right of front with contour gauge present

Case Vehicle: 1994 Plymouth Voyager, 5-Door Minivan, FWD, 7-Passenger, 3.0 L (181 in<sup>3</sup>) V-6 MPI





# 37: Reference line view of Case Vehicle's right side from front showing front bumper's slight rightward shift



# 38: Ground level view of Case Vehicle's air dam, from approximately 15 degrees right of front, which contacted ground prior to sign pole impact

Case Vehicle: 1994 Plymouth Voyager, 5-Door Minivan, FWD, 7-Passenger, 3.0 L (181 in<sup>3</sup>) V-6 MPI





# 39: Interior surface of Case Vehicle's driver door panel and deployed driver's side air bag and knee bolster viewed from outside driver's door



# 40: Case Vehicle's front seating area and deployed air bags showing contact to driver's air bag; NOTE: lipstick mark on driver's air bag (green dot)





# 41: Case Vehicle's front seating area and deployed air bags; NOTE: right front passenger contacts to right roof side rail and right "B"-pillar (green dots)



# 42: Close-up of contacts to Case Vehicle's right side roof rail and "B"-pillar from right front passenger's head





# 43: Case Vehicle's contacted driver side air bag, center dash, and noncontacted knee bolster viewed from rear center seat



# 44: Case Vehicle's driver side air bag module showing air bag's vent ports, noncontacted steering wheel rim, and module's top cover flap





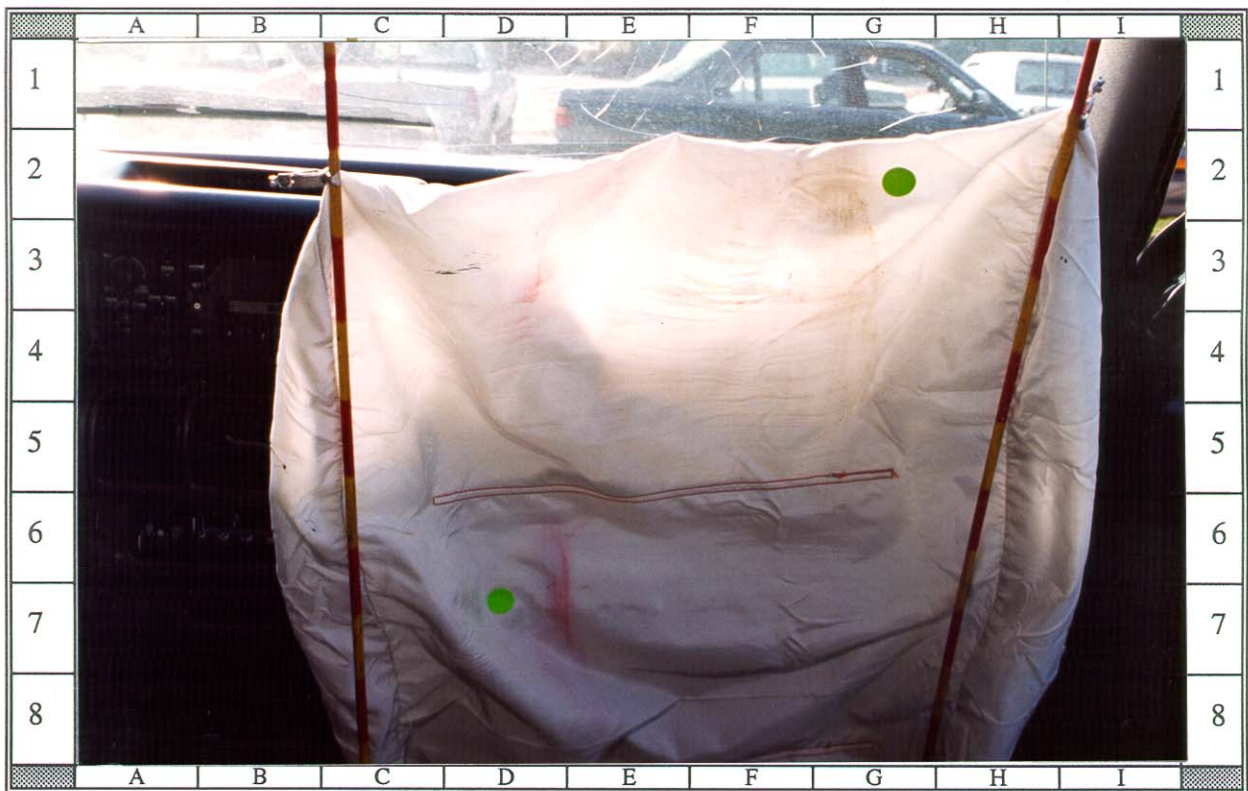
# 45: Close-up of Case Vehicle's driver side air bag module showing no evidence of contact to module's bottom cover flap



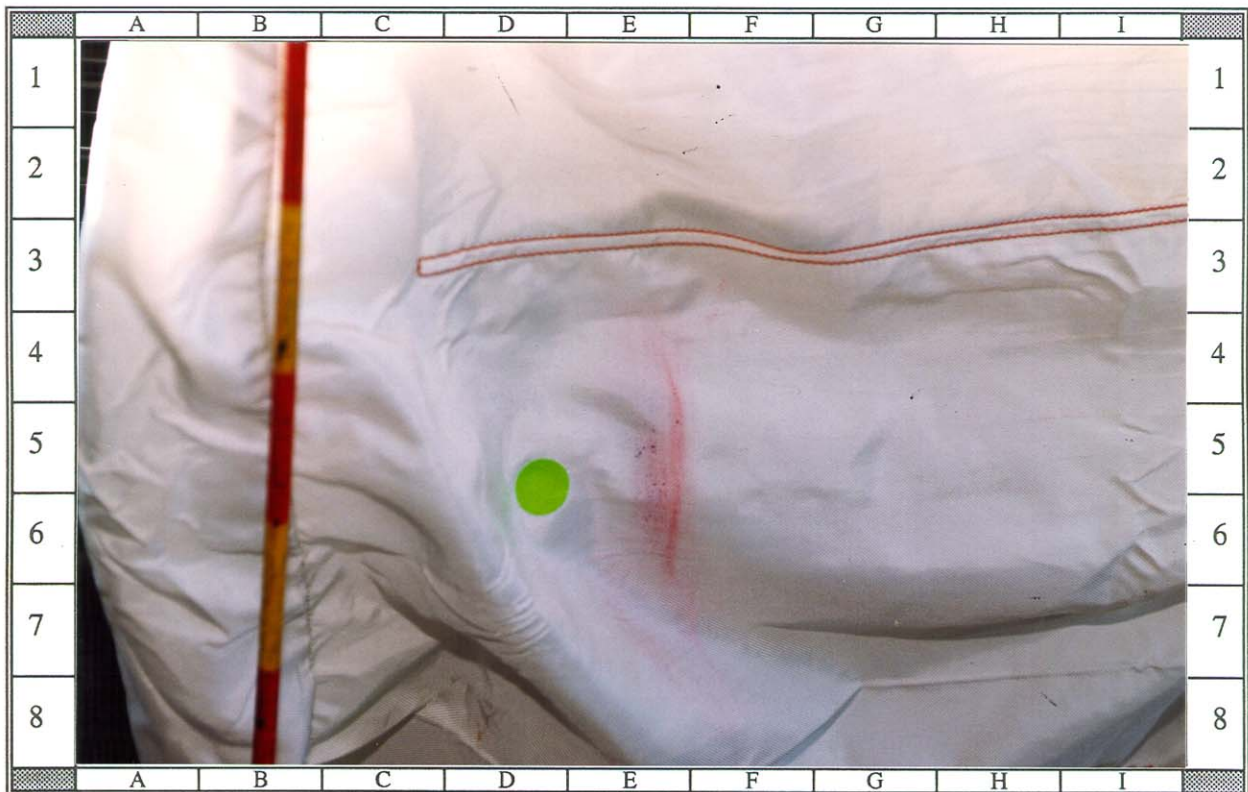
# 46: Case Vehicle's deployed air bags, front dash, and rearview mirror; NOTE: contacts to both air bags (green dots) and windshield (yellow tape)

Case Vehicle: 1994 Plymouth Voyager, 5-Door Minivan, FWD, 7-Passenger, 3.0 L (181 in<sup>3</sup>) V-6 MPI





# 47: Case Vehicle's right front air bag showing multiple areas of contact (green dots) by right front passenger



# 48: Close-up of contact to left center of Case Vehicle's right front air bag showing skin and smear by unknown red substance

Case Vehicle: 1994 Plymouth Voyager, 5-Door Minivan, FWD, 7-Passenger, 3.0 L (181 in<sup>3</sup>) V-6 MPI





# 49: Close-up of contact to right upper portion of Case Vehicle's right front air bag showing a large amount of skin transfer and an unknown red smear



# 50: Top portion of Case Vehicle's right front air bag showing module's cover flap and skin and red substance smearing near right upper portion of air bag

Case Vehicle: 1994 Plymouth Voyager, 5-Door Minivan, FWD, 7-Passenger, 3.0 L (181 in<sup>3</sup>) V-6 MPI





# 51: Close-up of contact evidence to upper portion of Case Vehicle's right front air bag; NOTE: green dot is identical to green dot shown in Photo #49 above

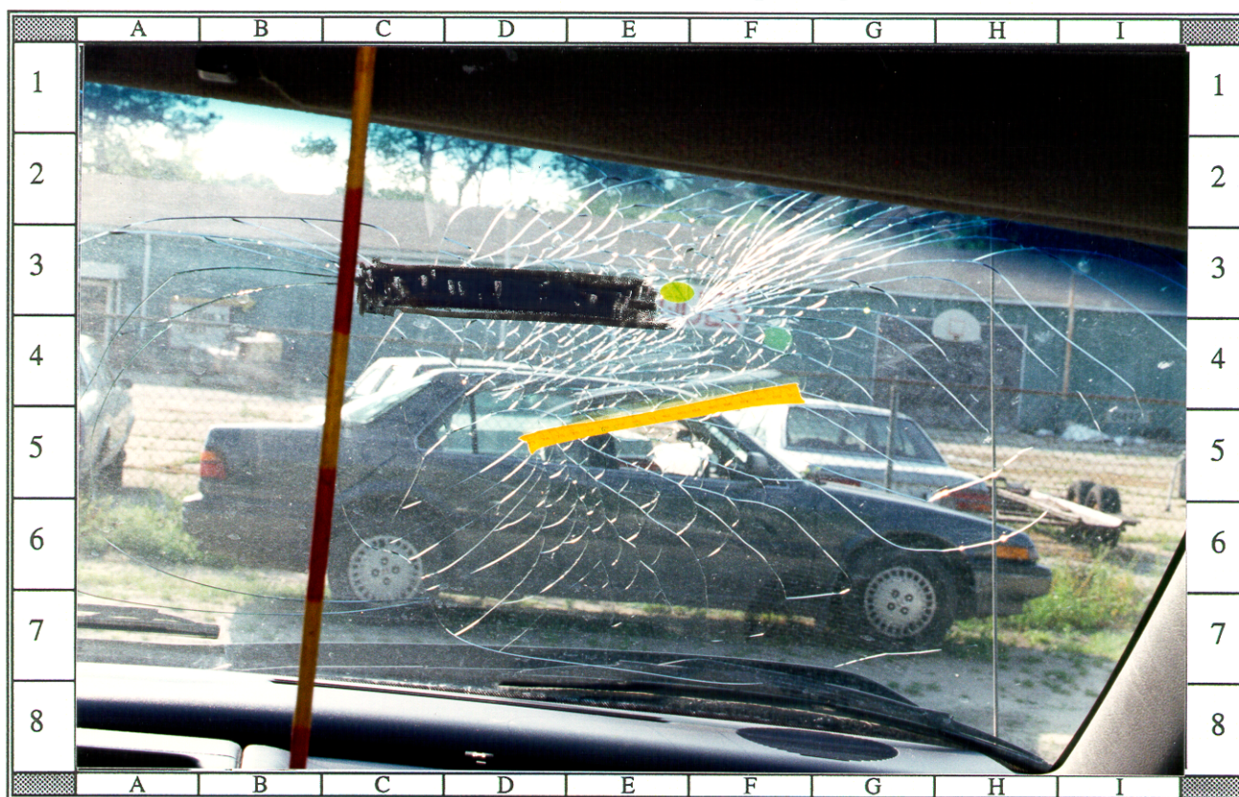


# 52: Close-up of cover flap from Case Vehicle's right front air bag module showing contact (oil smudge) from right front passenger's chin/neck





# 53: Close-up of cover flap's corner edge from Case Vehicle's right front air bag module showing contact evidence (skin) from passenger's neck/chin



# 54: Case Vehicle's windshield showing evidence of contact (smear above/along yellow tape) from right front passenger's head

Case Vehicle: 1994 Plymouth Voyager, 5-Door Minivan, FWD, 7-Passenger, 3.0 L (181 in<sup>3</sup>) V-6 MPI





# 55: Case Vehicle's glovebox showing scuff mark most likely from right front passenger's lower extremities



# 56: Close-up of scuff mark on Case Vehicle's glovebox





# 57: Case Vehicle's right dash showing tears (yellow tape) in dash which occurred during right front air bag's deployment; NOTE: separation (cell I3)

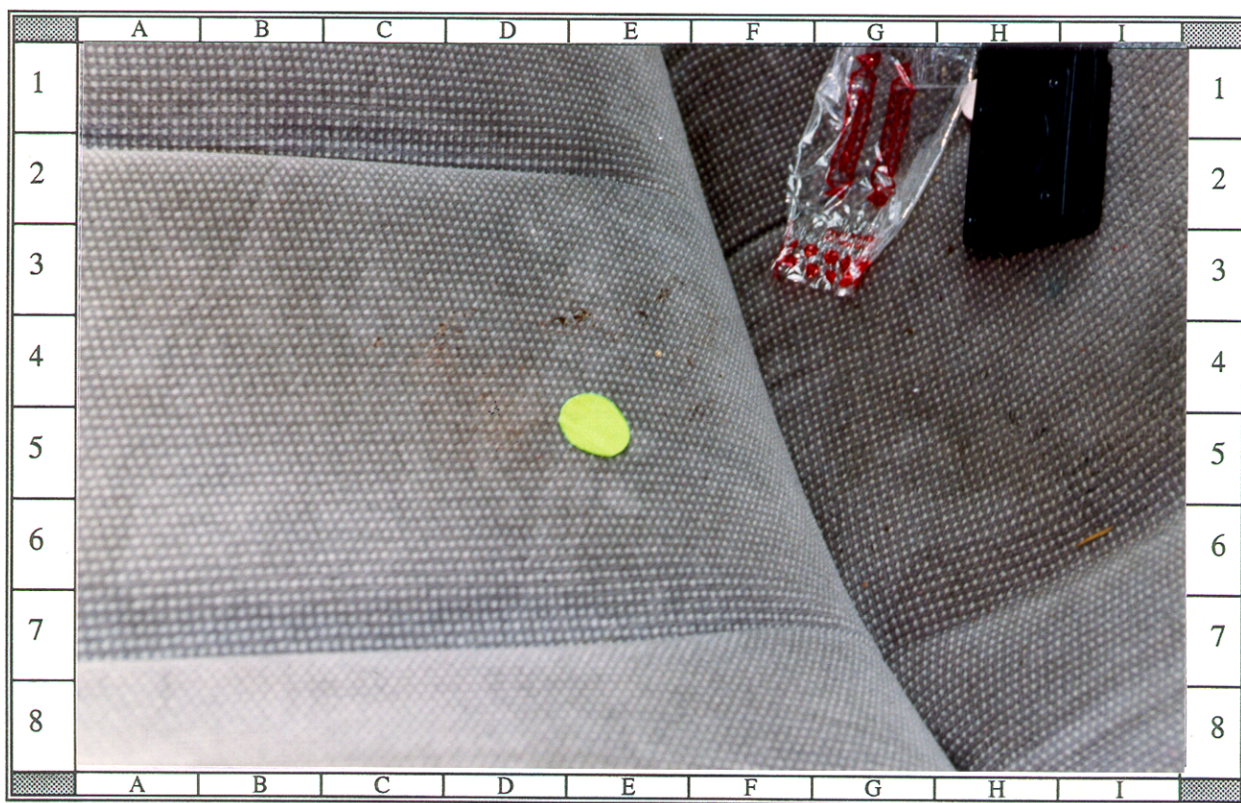


# 58: Close-up of tear to Case Vehicle's dash near left lower corner of right front air bag module's compartment





# 59: Close-up of tear to Case Vehicle's dash near right lower corner of right front air bag module's compartment



# 60: Close-up of Case Vehicle's right front passenger seatback showing skin transfer and blood smear to base of seatback

Case Vehicle: 1994 Plymouth Voyager, 5-Door Minivan, FWD, 7-Passenger, 3.0 L (181 in<sup>3</sup>) V-6 MPI





# 61: Case Vehicle's right front passenger seat showing blood spot on vertical surface (green dot) of auxiliary glovebox underneath seat



# 62: Close-up of blood spot on vertical surface of auxiliary glovebox underneath Case Vehicle's right front passenger seat





# 63: Case Vehicle's front seating area and deployed air bags viewed from outside right front passenger's door



# 64: On-scene view of Case Vehicle's front seating area and deployed air bags viewed from outside right front passenger's door

Case Vehicle: 1994 Plymouth Voyager, 5-Door Minivan, FWD, 7-Passenger, 3.0 L (181 in<sup>3</sup>) V-6 MPI





# 65: Interior surface of Case Vehicle's right front passenger door panel and deployed air bag; NOTE: no contact evidence to door panel



# 66: Case Vehicle's second seating area where two three year-olds were seated in booster seats of unknown type; NOTE: 3-point safety belts at outboard positions

Case Vehicle: 1994 Plymouth Voyager, 5-Door Minivan, FWD, 7-Passenger, 3.0 L (181 in<sup>3</sup>) V-6 MPI





# 67: Case Vehicle's second seating area and front seatbacks which showed no evidence of contacts from second seat passengers



# 68: Close-up of Case Vehicle driver's seatback; NOTE: no evidence of contact from left second-seated passenger

Case Vehicle: 1994 Plymouth Voyager, 5-Door Minivan, FWD, 7-Passenger, 3.0 L (181 in<sup>3</sup>) V-6 MPI





# 69: Close-up of Case Vehicle passenger's seatback; NOTE: no evidence of contact from right second-seated passenger



# 70: 1986 Chevrolet Celebrity's damaged right side, viewed from approximately 45 degrees right of front, from initial impact with Case Vehicle

Case Vehicle: 1994 Plymouth Voyager, 5-Door Minivan, FWD, 7-Passenger, 3.0 L (181 in<sup>3</sup>) V-6 MPI





# 71: Close-up of direct damage to Vehicle #2's right front fender viewed from right



# 72: Close-up of direct damage to Vehicle #2's right front fender and passenger door viewed from approximately 75 degrees right of front

Vehicle #2: 1986 Chevrolet Celebrity, 4-Door Sedan, FWD, 6-Passenger, 2.5 L (151 in<sup>3</sup>) I-4 EFI





# 73: Right overhead view of Vehicle #2's damaged right side; NOTE: yellow tape represents C-measurements and spiderweb pattern to right windshield



# 74: Vehicle #2's damaged right side, viewed from right, from impact with Case Vehicle's front

Vehicle #2: 1986 Chevrolet Celebrity, 4-Door Sedan, FWD, 6-Passenger, 2.5 L (151 in<sup>3</sup>) I-4 EFI





# 75: Close-up of Vehicle #2's right side deformation viewed from approximately 60 degrees right of back



# 76: Vehicle #2's undamaged right back side and back viewed from approximately 45 degrees right of back

Vehicle #2: 1986 Chevrolet Celebrity, 4-Door Sedan, FWD, 6-Passenger, 2.5 L (151 in<sup>3</sup>) I-4 EFI





# 77: Vehicle #2's undamaged back and left side viewed from approximately 45 degrees left of back



# 78: Vehicle #2's damaged front and undamaged left side viewed from approximately 75 degrees left of front; NOTE: frontal impact was from utility pole

Vehicle #2: 1986 Chevrolet Celebrity, 4-Door Sedan, FWD, 6-Passenger, 2.5 L (151 in<sup>3</sup>) I-4 EFI





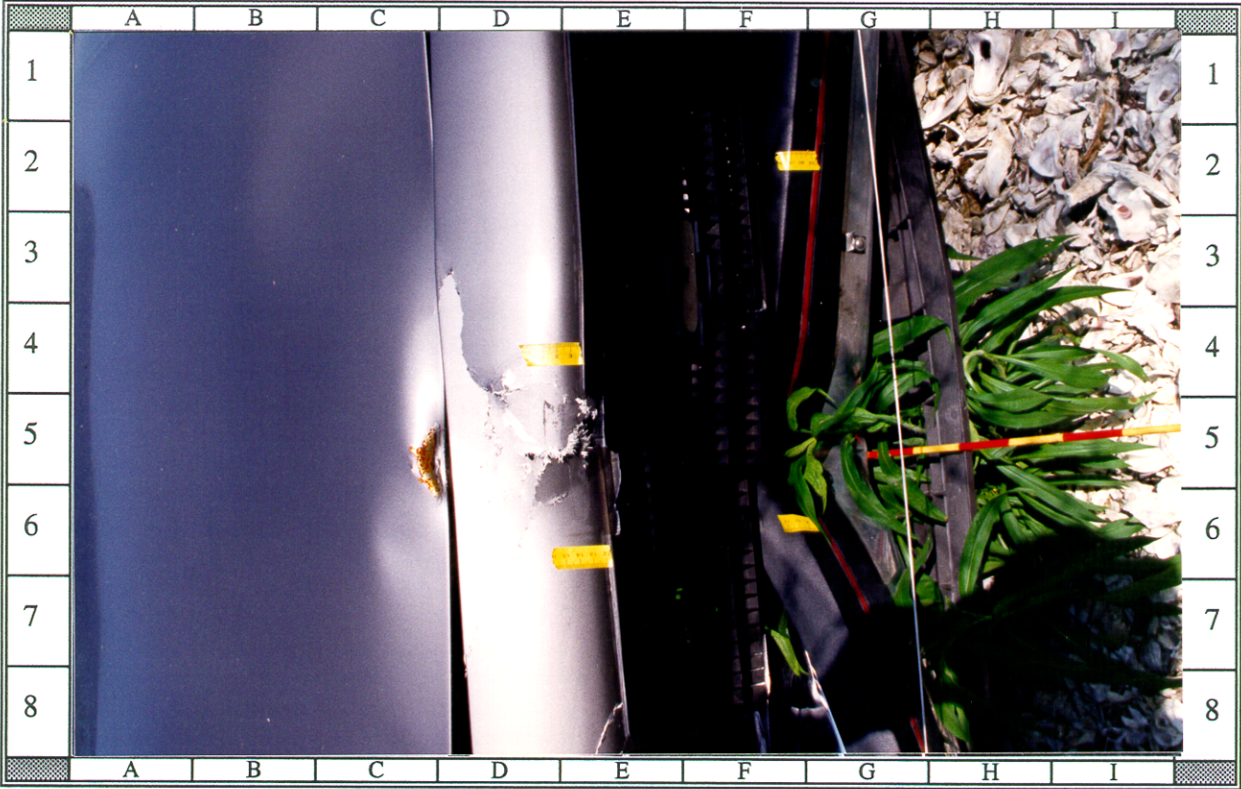
# 79: Reference line view of Vehicle #2's frontal damage from left; NOTE: frontal impact was from utility pole



# 80: Close-up of Vehicle #2's frontal damage from impact with utility pole viewed from approximately 60 degrees left of front

Vehicle #2: 1986 Chevrolet Celebrity, 4-Door Sedan, FWD, 6-Passenger, 2.5 L (151 in<sup>3</sup>) I-4 EFI





# 81: Close-up of Vehicle #2's direct damage from impact with utility pole; NOTE: narrow impact area



# 82: Close-up of Vehicle #2's frontal damage from impact with utility pole viewed from approximately 45 degrees right of front

Vehicle #2: 1986 Chevrolet Celebrity, 4-Door Sedan, FWD, 6-Passenger, 2.5 L (151 in<sup>3</sup>) I-4 EFI





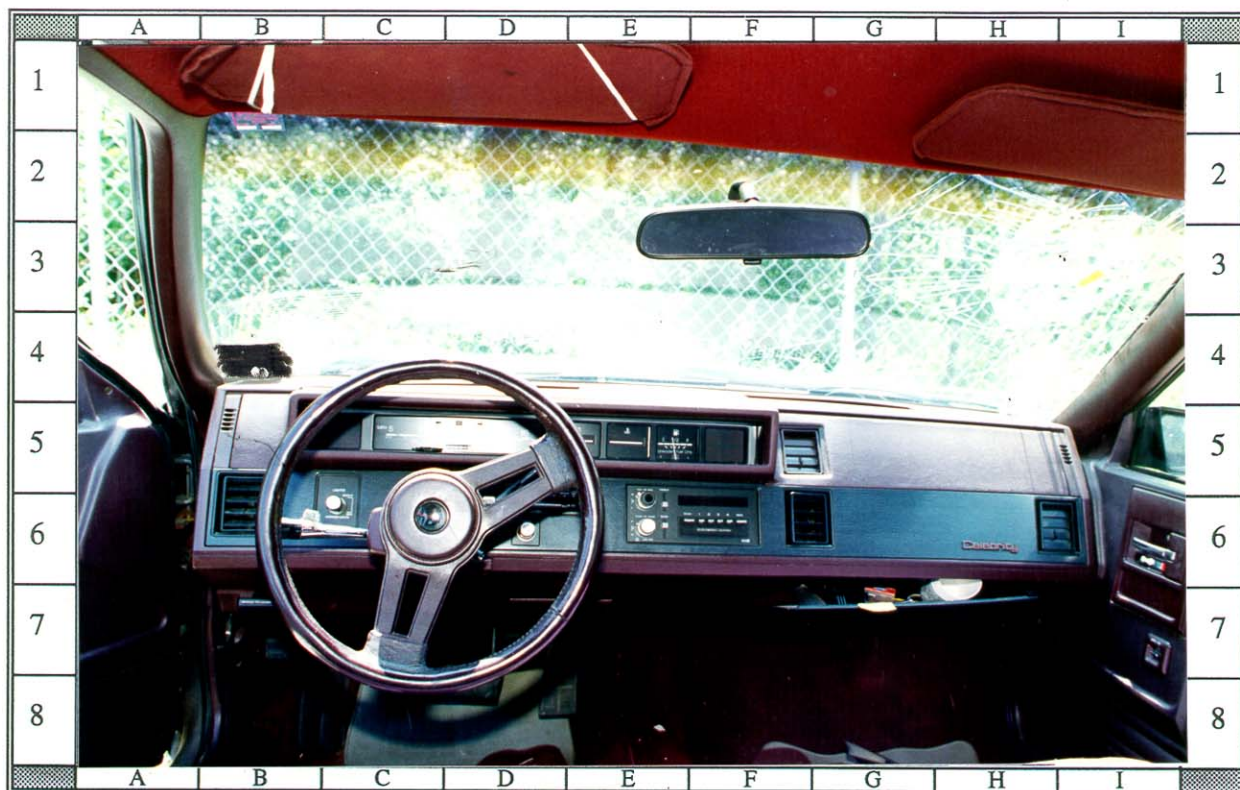
# 83: Interior surface of Vehicle #2's driver door panel, steering wheel, and front dash area viewed from outside driver's door; NOTE: no evidence of contact



# 84: Vehicle #2's front seating area, steering wheel, and dash; NOTE: contacts to right side of windshield and dash from driver

Vehicle #2: 1986 Chevrolet Celebrity, 4-Door Sedan, FWD, 6-Passenger, 2.5 L (151 in<sup>3</sup>) I-4 EFI





# 85: Vehicle #2's steering wheel, front dash, rearview mirror, windshield and header area viewed from rear center seat



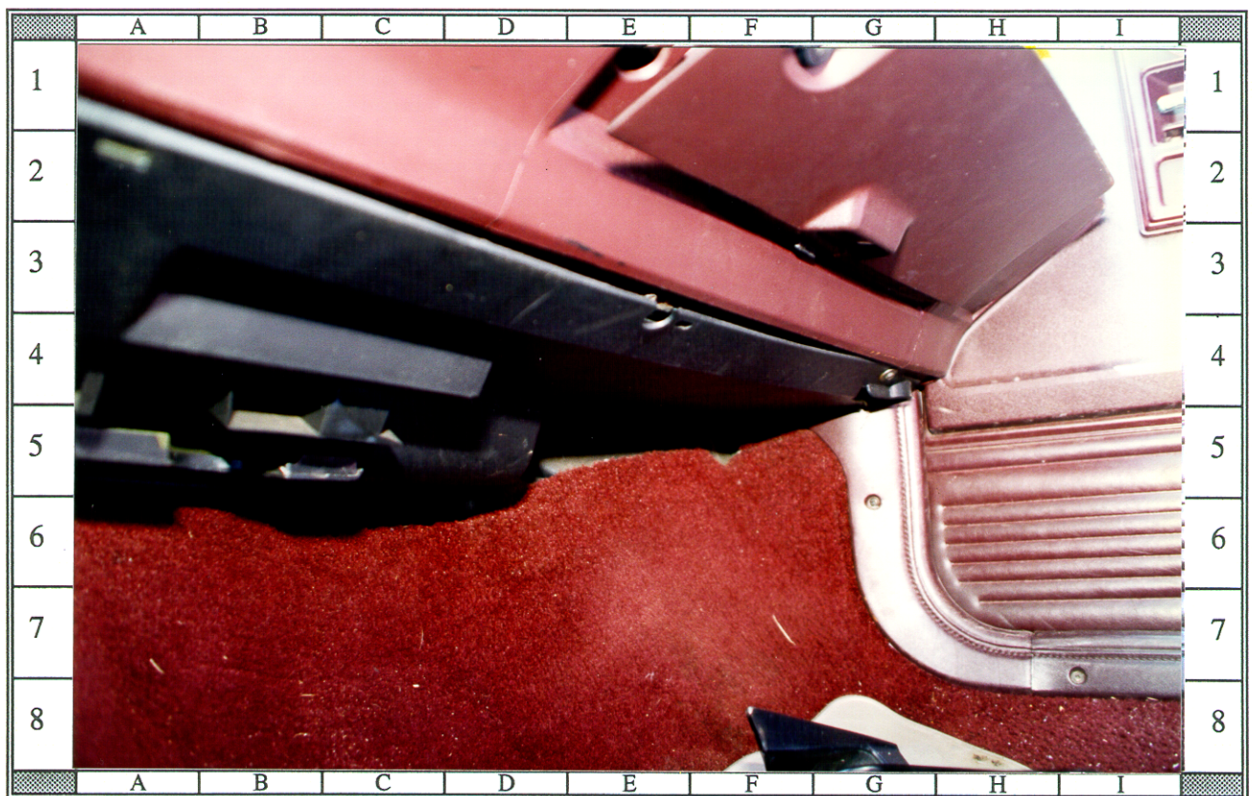
# 86: Vehicle #2's contacted right windshield and lower dash; NOTE: driver was unbelted and thrown towards 2 o'clock PDOF

Vehicle #2: 1986 Chevrolet Celebrity, 4-Door Sedan, FWD, 6-Passenger, 2.5 L (151 in<sup>3</sup>) I-4 EFI





# 87: Close-up of Vehicle #2's broken glovebox from driver contact



# 88: Close-up of Vehicle #2's toepan area showing minor intrusion

Vehicle #2: 1986 Chevrolet Celebrity, 4-Door Sedan, FWD, 6-Passenger, 2.5 L (151 in<sup>3</sup>) I-4 EFI





# 89: Vehicle #2's rear seating area; NOTE: front seat headrests and outboard, 3-point safety belts, and three, 2-point, lap belts in rear seating area



# 90: Vehicle #2's driver seatbelt showing signs of previous usage

Vehicle #2: 1986 Chevrolet Celebrity, 4-Door Sedan, FWD, 6-Passenger, 2.5 L (151 in<sup>3</sup>) I-4 EFI

**EDCRASH**  
**(DAMAGE ONLY ALGORITHM)**



S U M M A R Y    O F    E D C R A S H    R E S U L T S

Lic. User: NHTSA    S/N: 0266-8    Version: 4.61

Date: 1996    SCI 96-12 N.C.

MESSAGES:

NO MESSAGES

VEHICLE # 1

IMPACT SPEED km/h		SPEED CHANGE km/h			BASIS FOR RESULTS
FWD	LAT	TOTAL	LONG.	LATERAL	
N/A	N/A	N/A	N/A	N/A	SPINOUT TRAJECTORIES AND CONSERVATION OF LINEAR MOMENTUM
N/A	N/A	N/A	N/A	N/A	SPINOUT TRAJECTORIES AND DAMAGE
		11.0	-10.8	1.9	DAMAGE DATA ONLY

VEHICLE # 2

IMPACT SPEED km/h		SPEED CHANGE km/h			BASIS FOR RESULTS
FWD	LAT	TOTAL	LONG.	LATERAL	
N/A	N/A	N/A	N/A	N/A	SPINOUT TRAJECTORIES AND CONSERVATION OF LINEAR MOMENTUM
N/A	N/A	N/A	N/A	N/A	SPINOUT TRAJECTORIES AND DAMAGE
		14.9	-2.6	-14.7	DAMAGE DATA ONLY

SUMMARY OF DAMAGE DATA  
(NOTE: '\*\*\*' indicates default value)

	Vehicle #1	Vehicle #2
CLASS / STIFFNESS CATEGORIES	4 / 4	3 / 3
WEIGHT	1776.5 kg	1310.0 kg
CDC	12FDEW1	03RYEW3
DAMAGE WIDTH	154.0 cm	199.0 cm
CRUSH DEPTH 1	19.0 cm	0.0 cm
CRUSH DEPTH 2	10.0 cm	3.0 cm
CRUSH DEPTH 3	9.0 cm	11.0 cm
CRUSH DEPTH 4	8.0 cm	6.0 cm
CRUSH DEPTH 5	4.0 cm	6.0 cm
CRUSH DEPTH 6	0.0 cm	0.0 cm
DAMAGE MIDPOINT OFFSET	0.0 cm	154.0 cm
DAMAGE ENERGY	22810.9 Joules	7088.8 Joules
MAGNITUDE OF PRINCIPAL FORCE	126965.7 N	102679.2 N
DIRECTION OF PRINCIPAL FORCE	-10.0 deg	80.0 deg
MOMENT ARM OF PRINCIPAL FORCE	20.1 cm	-139.3 cm
DAMAGE CENTROID	-22.9 cm	157.1 cm

DIMENSIONAL, INERTIAL AND CRUSH STIFFNESS PROPERTIES  
(NOTE: '\*\*\*' indicates default value)

	Vehicle #1		Vehicle #2	
CG TO FRONT AXLE	138.9 cm	**	130.3 cm	**
CG TO REAR AXLE	150.4 cm	**	141.0 cm	**
TRACKWIDTH	157.0 cm	**	149.6 cm	**
YAW MOMENT OF INERTIA	4284.4 kg-m <sup>2</sup>	**	2807.2 kg-m <sup>2</sup>	**
MASS	1773.6 kg		1307.8 kg	
BODY LENGTH FROM CG TO FRONT	251.0 cm	**	228.1 cm	**
BODY LENGTH FROM CG TO REAR	-289.6 cm	**	-270.3 cm	**
BODY OVERALL WIDTH	195.6 cm	**	184.4 cm	**

## CRUSH STIFFNESSES:

A	B	A	B
lb/in	lb/in <sup>2</sup>	lb/in	lb/in <sup>2</sup>
355.9 **	33.8 **	173.3 **	57.1 **



CASE NUMBER In 9612

**NO  
DATA**

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## TRC VECTOR ANALYSIS ITERATIONS

The TRC Vector Analysis program was used to determine the resultant theoretical Direction of Principal Force (PDOF) for both vehicles. Heading angles were determined from a combination of the Police Accident Report, the scene, and the vehicle inspections and weights were obtained from original specifications and interviewees. Based on our inspection of the each vehicle's crush, this contractor initially estimated the PDOFs as -30 degrees for the case vehicle and -90 degrees for vehicle #2.

The driver of the case vehicle indicated in her interview that she was traveling about the posted SPEED LIMIT of 56 km.p.h. (35 m.p.h.), when she attempted to brake and steer right to avoid vehicle #2. Because the case vehicle's driver definite realized the impending impact and her rightward steering maneuver, supported by the crush to the case vehicle, her speed at impact was most likely 40-48 km.p.h. (25-30 m.p.h.). The Police Accident Report and the case vehicle's driver indicated that vehicle #2 pulled out in front of the case vehicle and continued straight across her original travel path. According to the driver of vehicle #2, she indicated that she never saw the case vehicle. Therefore, vehicle #2 most likely was going approximately 8-16 km.p.h. (5-10 m.p.h.) at impact.

Six iterations of vehicle speeds are shown below: 40-56 km.p.h. (25-35 m.p.h.) for the case vehicle and 8-16 km.p.h. (5-10 m.p.h.) for vehicle #2. The program indicates that as vehicle #2's speed increases, the force collinearity vector rotates from -90 degrees toward -80 degrees for vehicle #2 while moving between -6 and -15 degrees for the case vehicle. Iterations two and four most closely match the observed vehicle crush. Therefore, the impact speeds for the case vehicle and vehicle #2 are most likely 48 km.p.h. (30 m.p.h.) and 16 km.p.h. (10 m.p.h.), respectively. In accordance with NASS, CDS protocol, the PDOFs were assigned at -10 for the case vehicle and -80 for vehicle #2.



PDOF & Delta V Estimation From At Impact Heading Angles, Slip, and Momentum

Case Number: TRC/IU 96-12 - Task 0047

Vehicle Numbers: 01 and 02

(Both Vehicles Must Be Tracking Or CRASH 3 Slip Angle(s) Estimated)

(Neither Vehicle May Be Backing)

(If The Back Of A Vehicle Is Involved, Its Speed Must Be Set To Zero)

(Some Configurations Involving Heavy Trucks Give Erroneous Results)

Vector Analysis Area	GV27(V01)	GV28(V02)		
Ln. Axis Heading Angle	186	270		
CG Heading Angle	186	270		
CRASH 3 Slip Angle	0	0		
Weight-Cargo	11	0		
Weight-Vehicle Curb Wt	1649	1232		
Weight-Passenger(s)	117	78		
Weight-Total	1777	1310		
Estimated Speed	56 (35)	8 (5)	(m.p.h.)	
Momentum	99512	10480		
PDOF (Degrees)	-6	90	91	STM
PDOF (Clock Direction)	12	3		
Theoretical Delta V	23.7	32.1		
Theoretical Common Vel.		32.8	Post-Crash CG Heading	192

#1

PDOF & Delta V Estimation From At Impact Heading Angles, Slip, and Momentum

Case Number: TRC/IU 96-12 - Task 0047

Vehicle Numbers: 01 and 02

(Both Vehicles Must Be Tracking Or CRASH 3 Slip Angle(s) Estimated)

(Neither Vehicle May Be Backing)

(If The Back Of A Vehicle Is Involved, Its Speed Must Be Set To Zero)

(Some Configurations Involving Heavy Trucks Give Erroneous Results)

Vector Analysis Area	GV27(V01)	GV28(V02)		
Ln. Axis Heading Angle	186	270		
CG Heading Angle	186	270		
CRASH 3 Slip Angle	0	0		
Weight-Cargo	11	0		
Weight-Vehicle Curb Wt	1649	1232		
Weight-Passenger(s)	117	78		
Weight-Total	1777	1310		
Estimated Speed	56 (35)	16 (10)	(m.p.h.)	
Momentum	99512	20960		
PDOF (Degrees)	-12	84	91	STM
PDOF (Clock Direction)	12	3		
Theoretical Delta V	24.0	32.6		
Theoretical Common Vel.		33.6	Post-Crash CG Heading	198

#2

PDOF & Delta V Estimation From At Impact Heading Angles, Slip, and Momentum  
Case Number: TRC/IU 96-12 - Task 0047

Vehicle Numbers: 01 and 02

(Both Vehicles Must Be Tracking Or CRASH 3 Slip Angle(s) Estimated)

(Neither Vehicle May Be Backing)

(If The Back Of A Vehicle Is Involved, Its Speed Must Be Set To Zero)

(Some Configurations Involving Heavy Trucks Give Erroneous Results)

Vector Analysis Area	GV27(V01)	GV28(V02)		
Ln. Axis Heading Angle	186	270		
CG Heading Angle	186	270		
CRASH 3 Slip Angle	0	0		
Weight-Cargo	11	0		
Weight-Vehicle Curb Wt	1649	1232		
Weight-Passenger(s)	117	78		
Weight-Total	1777	1310		
Estimated Speed	48 (30)	8 (5) (m.p.h.)		
Momentum	85296	10480		
PDOF (Degrees)	-7	89	██████/91	STM
PDOF (Clock Direction)	12	3		
Theoretical Delta V	20.3	27.5		
Theoretical Common Vel.		28.2	Post-Crash CG Heading	193

#3

PDOF & Delta V Estimation From At Impact Heading Angles, Slip, and Momentum  
Case Number: TRC/IU 96-12 - Task 0047

Vehicle Numbers: 01 and 02

(Both Vehicles Must Be Tracking Or CRASH 3 Slip Angle(s) Estimated)

(Neither Vehicle May Be Backing)

(If The Back Of A Vehicle Is Involved, Its Speed Must Be Set To Zero)

(Some Configurations Involving Heavy Trucks Give Erroneous Results)

Vector Analysis Area	GV27(V01)	GV28(V02)		
Ln. Axis Heading Angle	186	270		
CG Heading Angle	186	270		
CRASH 3 Slip Angle	0	0		
Weight-Cargo	11	0		
Weight-Vehicle Curb Wt	1649	1232		
Weight-Passenger(s)	117	78		
Weight-Total	1777	1310		
Estimated Speed	48 (30)	16 (10) (m.p.h.)		
Momentum	85296	20960		
PDOF (Degrees)	-14	82	██████/91	STM
PDOF (Clock Direction)	12	3		
Theoretical Delta V	20.8	28.2		
Theoretical Common Vel.		29.1	Post-Crash CG Heading	199

#4



PDOF & Delta V Estimation From At Impact Heading Angles, Slip, and Momentum  
Case Number: TRC/IU 96-12 - Task 0047

Vehicle Numbers: 01 and 02

(Both Vehicles Must Be Tracking Or CRASH 3 Slip Angle(s) Estimated)

(Neither Vehicle May Be Backing)

(If The Back Of A Vehicle Is Involved, Its Speed Must Be Set To Zero)

(Some Configurations Involving Heavy Trucks Give Erroneous Results)

Vector Analysis Area	GV27(V01)	GV28(V02)
Ln. Axis Heading Angle	186	270
CG Heading Angle	186	270
CRASH 3 Slip Angle	0	0
Weight-Cargo	11	0
Weight-Vehicle Curb Wt	1649	1232
Weight-Passenger(s)	117	78
Weight-Total	1777	1310
Estimated Speed	40 (25)	8 (5) (m.p.h.)
Momentum	71080	10480
PDOF (Degrees)	-8	88 [REDACTED]/91 STM
PDOF (Clock Direction)	12	3
Theoretical Delta V	17.0	23.0
Theoretical Common Vel.		23.6 Post-Crash CG Heading 194

# 5

PDOF & Delta V Estimation From At Impact Heading Angles, Slip, and Momentum  
Case Number: TRC/IU 96-12 - Task 0047

Vehicle Numbers: 01 and 02

(Both Vehicles Must Be Tracking Or CRASH 3 Slip Angle(s) Estimated)

(Neither Vehicle May Be Backing)

(If The Back Of A Vehicle Is Involved, Its Speed Must Be Set To Zero)

(Some Configurations Involving Heavy Trucks Give Erroneous Results)

Vector Analysis Area	GV27(V01)	GV28(V02)
Ln. Axis Heading Angle	186	270
CG Heading Angle	186	270
CRASH 3 Slip Angle	0	0
Weight-Cargo	11	0
Weight-Vehicle Curb Wt	1649	1232
Weight-Passenger(s)	117	78
Weight-Total	1777	1310
Estimated Speed	40 (25)	16 (10) (m.p.h.)
Momentum	71080	20960
PDOF (Degrees)	-17	79 [REDACTED]/91 STM
PDOF (Clock Direction)	11	3
Theoretical Delta V	17.6	23.9
Theoretical Common Vel.		24.7 Post-Crash CG Heading 202

# 6

## TRC VECTOR ANALYSIS PROGRAM

PDOF (Direction of Principal Force) is assigned based on the vehicular crush. Heading Angles are assigned based on scene evidence and Police Accident Reported crash configurations. This program was created to enable researchers in the NASS CDS to assess the compatibility of their assigned vehicle PDOFs and heading angles. When two vehicles are involved in an impact, researchers were often times submitting PDOFs that were not compatible with their heading angle assignments, indicating a lack of understanding of basic vector analysis concepts. Subsequently, the TRC has used this program to help verify our field PDOF assignments by making logical changes in the reconstructed crash configuration and determining the affect these changes have on PDOF.

**Principal:** This program is based on the geometric triangle rule (i.e., the sum of the three angles of a triangle must equal 180 degrees). The direction of one vehicle's (e.g., the case vehicle or Vehicle #1) CG (i.e., Center of Gravity) forms one side of the triangle. The direction of the other vehicle's (e.g., Vehicle #2) CG forms a second side of the triangle. The third side of the triangle is then formed by each vehicle's respective PDOF because the forces are assumed to act collinear.

**Assumptions:** It is assumed that each vehicle's weight can be represented by a *"point-mass"*. It is assumed that the vector force acting on each vehicle goes through the center of gravity (i.e., CG) of the vehicle. Further, it is assumed that the vehicles move off together joined as one object. This program does not take into affect the mass reduction that occurs in other reconstruction programs since its primary purpose is to check the compatibility of the field determined PDOF and Heading Angle.

**Inputs:** Heading Angle, Slip Angle (*"Yaw"*), Weights (Curb Weight, Cargo Weight, and Weight of all occupants), and Speed

**Outputs:** This program's primary output is each vehicle's theoretical PDOF, presented in both degrees and CDC clock directions. Other outputs include a theoretical Delta V and a theoretical Common Velocity. The theoretical Delta V shows the maximum Delta V for the given speeds and weights assuming a dead center impact. For special crash investigation purposes, the last two outputs should be essentially ignored.

**Use:** The TRC uses this program on nonaxial collisions involving two vehicles to vary the *"less established inputs"* in order to determine what theoretical affect these changes have on our field observed PDOFs. The most solid input is the weights of the respective vehicles. Even though the cargo weight is rarely accurately known, its order of magnitude is such that in the vast majority of crashes its affect is minor. The next solid inputs are the vehicle's heading angle and slip angle. In most cases these are fairly well known from the available physical evidence. The least solid input is the vehicle's speed. The submitted iterations show the inputs and what variations to those inputs that the TRC took into consideration. The PDOF outcomes are then compared with our field observed PDOF and adjustments are made, if necessary, in our final coding.

**Purpose:** This program is but one more tool in the hands of a researcher aimed at providing the best data.



TRANSPORTATION RESEARCH CENTER

Indiana University  
Bloomington, Indiana 47403-1599

**ON-SITE AIR BAG INVESTIGATION**

NASS CDS FORMS AND MEDICAL RECORDS

CASE NO. - 96-12  
FLEET - PRIVATE VEHICLE  
LOCATION - NORTH CAROLINA  
ACCIDENT DATE - [REDACTED] 1996

Submitted By:

[REDACTED]  
[REDACTED]  
and  
[REDACTED]  
[REDACTED]

[REDACTED] 1996

Revised Submission:

[REDACTED] 1999

Contract Number: [REDACTED]

Prepared for:

U.S. Department of Transportation  
National Highway Traffic Safety Administration  
National Center for Statistics and Analysis  
Washington, D.C. 20590-0003

**POLICE CRASH REPORT**



2 No. of Units Involved  
Supplemental Report

THIS REPORT IS FOR THE USE OF THE DIVISION OF MOTOR VEHICLES. THE DATA IS COLLECTED FOR STATISTICAL ANALYSIS AND SUBSEQUENT HIGHWAY SAFETY PROGRAMMING. DETERMINATIONS OF "FAULT" ARE THE RESPONSIBILITY OF INSURERS OR OF THE STATE'S COURTS.

DMV REPORT #

Date MONTH DAY YEAR 96	Day of Week	County	Time (24 Hour Clock) 11:42	Local Use / Patrol Area 2-3	Date Received by DMV
------------------------------	-------------	--------	----------------------------------	--------------------------------	----------------------

LOCATION  
Collision occurred ☒ In ☐ Near \_\_\_\_\_ or \_\_\_\_\_ Miles ☐ ☐ ☐ ☐ outside municipality  
Municipality \_\_\_\_\_  
on \_\_\_\_\_ (R.R. Crossing # \_\_\_\_\_) \_\_\_\_\_ Miles ☐ ☐ ☐ ☐ ft. ☐ ☐ ☐ ☐  
Highway Number, or Highway, Street, (If ramp or service road, indicate on line) (0 ft. - Intersection) N S E W  
at or from \_\_\_\_\_ St. ☐ ☒ ☐ ☐ toward \_\_\_\_\_ St. ☐ ☐ ☐ ☐  
Use Highway Number, Street Name or Adjacent County or State Line N S E W Use Highway Number, Street Name or Adjacent County or State Line

VEHICLE 1 ☐ HIT & RUN  
Driver 1 \_\_\_\_\_ Last \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State N.C. Zip \_\_\_\_\_  
Same Address on Driver's License? ☐ Yes ☒ No Driver's Phone No. W ( ) N/A  
D.L.# \_\_\_\_\_ State N.C. DOB \_\_\_\_\_ 74 months/day/year  
Vision 1. Obstruction / 2. Physical Condition / 3. Intoxication / Restrictions /

VEHICLE 2 ☐ PEDESTRIAN ☐ HIT & RUN ☐ OTHER  
Driver 2 \_\_\_\_\_ Last \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State N.C. Zip \_\_\_\_\_  
Same Address on Driver's License? ☐ Yes ☒ No Driver's Phone No. W ( ) N/A  
D.L.# \_\_\_\_\_ State N.C. DOB \_\_\_\_\_ 22 months/day/year  
Vision 1. Obstruction / 2. Physical Condition / 3. Intoxication / Restrictions /

Owner \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State N.C. Zip \_\_\_\_\_  
VIN \_\_\_\_\_  
Plate # \_\_\_\_\_ State N.C. Year 96  
Veh. Year 86 Veh. Make CHEV. Veh. Type Code P  
Commercial Vehicle ☐ Yes ☒ No Trailer Type Code \_\_\_\_\_  
Air Bag ☐ Yes ☒ No 1st Trailer No. of Axles \_\_\_\_\_  
Deployed ☐ Yes ☒ No Width \_\_\_\_\_ inches  
Vehicle Drivable ☐ Yes ☒ No Length \_\_\_\_\_ feet  
Post Crash Fire ☐ Yes ☒ No 2nd Trailer No. of Axles \_\_\_\_\_  
Rollover ☐ Yes ☒ No Width \_\_\_\_\_ inches  
Hazardous Cargo ☐ Yes ☒ No Length \_\_\_\_\_ feet  
Spilled ☐ Yes ☒ No TAD \_\_\_\_\_  
Crossed Median ☐ Yes ☒ No Est. Damage \$ 3,500.00  
Removed to \_\_\_\_\_  
By \_\_\_\_\_ Authority \_\_\_\_\_

Owner \_\_\_\_\_  
Address \_\_\_\_\_ Rd.  
City \_\_\_\_\_ State N.C. Zip \_\_\_\_\_  
VIN \_\_\_\_\_  
Plate # \_\_\_\_\_ State N.C. Year 96  
Veh. Year 94 Veh. Make PLYM. Veh. Type Code VN  
Commercial Vehicle ☐ Yes ☒ No Trailer Type Code \_\_\_\_\_  
Air Bag ☐ Yes ☒ No 1st Trailer No. of Axles \_\_\_\_\_  
Deployed ☐ Yes ☒ No Width \_\_\_\_\_ inches  
Vehicle Drivable ☐ Yes ☒ No Length \_\_\_\_\_ feet  
Post Crash Fire ☐ Yes ☒ No 2nd Trailer No. of Axles \_\_\_\_\_  
Rollover ☐ Yes ☒ No Width \_\_\_\_\_ inches  
Hazardous Cargo ☐ Yes ☒ No Length \_\_\_\_\_ feet  
Spilled ☐ Yes ☒ No TAD \_\_\_\_\_  
Crossed Median ☐ Yes ☒ No Est. Damage \$ 5,000.00  
Removed to \_\_\_\_\_  
By WRECKER Authority Rotation

Other Property Damaged N/A Estimated Damage \$ N/A Owner Name N/A Address N/A

OCCUPANT SECTION INSTRUCTIONS: Give Injury Class, Belt/Helmet Usage, Race/Sex and Age of all occupants in the space corresponding to the seat occupied (see codes at top). Names and addresses are necessary for all occupants.

Seat	4. Inj. Class	5. Belt / Hel.	6. Race / Sex	Age	First Name	Injured Names and Addresses	Last Name	Seat	4. Inj. Class	5. Belt / Hel.	6. Race / Sex	Age	First Name	Injured Names and Addresses	Last Name
Left Front	B	1	B/F	74		DRIVER 1		Left Front	O	3	F	24		DRIVER 2, PEDESTRIAN, OTHER	
Center Front								Center Front							
Right Front								Right Front	A	1	F	4			
Left Rear								Left Rear	O	2	F	3			
Center Rear								Center Rear							
Right Rear								Right Rear	O	2	F	3			

Total Number Occupants / Total Number Injured / Total Number Occupants / Total Number Injured /  
Ambulance Requested ☒ Yes ☐ No If yes, Ambulance Arrived At 11:51 (24 Hour Clock)  
Injured Taken To \_\_\_\_\_ co. Hospital \_\_\_\_\_, N.C.  
(Treatment Facility and City or Town)

N.C. COLLISION REPORT FORM — Send To: N. C. Division of Motor Vehicles

MARKS & ADDED BY (Initials)

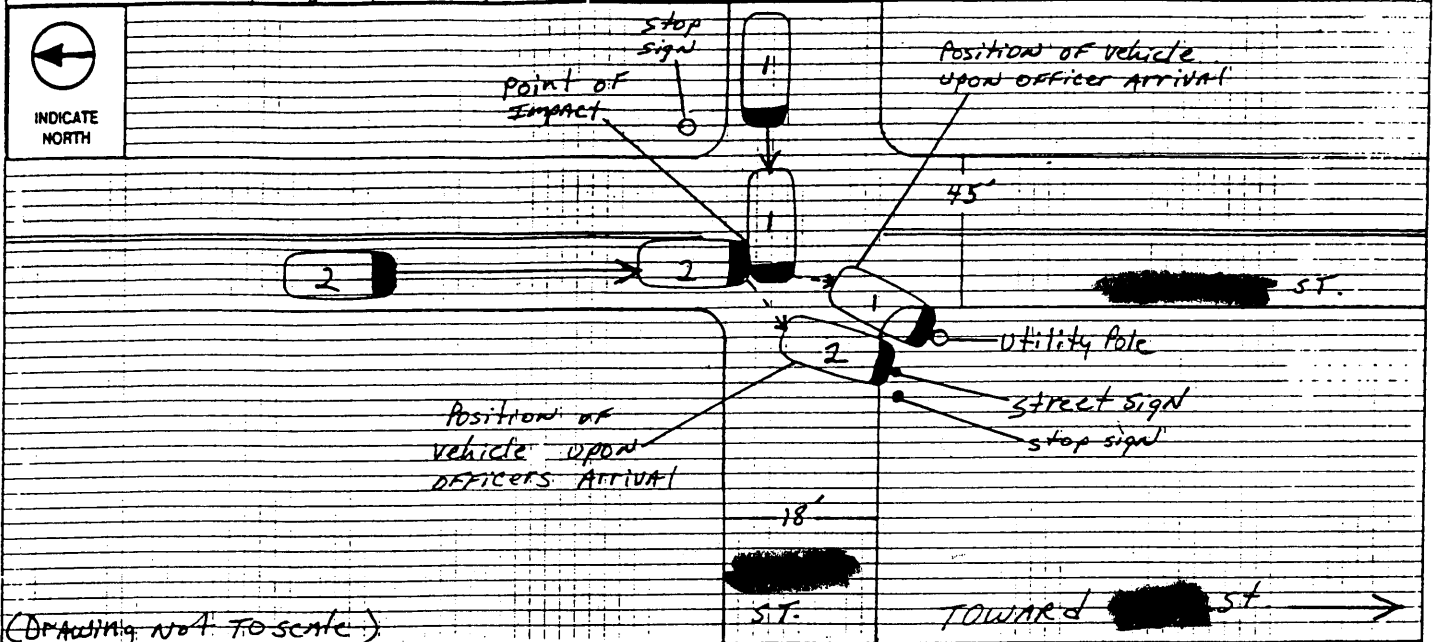
POINTS OF INITIAL CONTACT (Write in Codes)		VEH. 1		VEH. 2	
		20		1, 2, 3	

Passenger Cars/Small Trucks		Tractor-Trailers		Motorcycle, Bicycle or Moped	
0. No Contact		25. Rollover			
UNDERNEATH: 22. Front 23. Center 24. Rear 25. Unknown					

ACCIDENT SEQUENCE		VEH. 1		VEH. 2		ROADWAY INFORMATION (See Front)	
6. Veh. Maneuver/Prod. Action	12	4				11. Locality	3
7. First Harmful Event	22					12. Development Type	2
7. Most Harmful Event	22	22				13. Road Feature	6
8. Object Struck	7	10				14. Road Character	1
9. Distance to Object Struck	3	3				15. Road Class	5
10. Vehicle Defects	8	8				16. Number of Lanes	2
						17. Road Configuration	3
						18. Road Surface	4
						19. Road Defects	7
						20. Road Condition	1
						21. Light Condition	1
						22. Weather	1
						23. Traffic Control	1
						Operating	Yes No
						Visible	Yes No



Vehicle 1 was Traveling ☐ N ☐ S ☐ E ☒ W on ST. Vehicle 2 was Traveling ☐ N ☒ S ☐ E ☐ W on ST.

DESCRIBE WHAT HAPPENED:  
 Vehicle (2) two WAS traveling south on ST. Vehicle (1) one Attempted to enter the intersection AND Failed to see before starting AND struck Vehicle (2) two.

CIRCUMSTANCES CONTRIBUTING TO THE COLLISION (Check as many as apply)						RESERVED FOR CITY OR OTHER USE	
DRIVER 1		DRIVER 2		DRIVER 3			
1	2	1	2	1	2		
<input checked="" type="checkbox"/> 1. None	<input type="checkbox"/> 10. Pass stopped school bus	<input checked="" type="checkbox"/> 19. Safe movement violation					
<input type="checkbox"/> 2. Alcohol use	<input type="checkbox"/> 11. Passing on hill	<input type="checkbox"/> 20. Following too closely					
<input type="checkbox"/> 3. Drug use	<input type="checkbox"/> 12. Passing on curve	<input type="checkbox"/> 21. Improper backing					
<input type="checkbox"/> 4. Yield	<input type="checkbox"/> 13. Other improper passing	<input type="checkbox"/> 22. Improper parking					
<input type="checkbox"/> 5. Stop sign	<input type="checkbox"/> 14. Improper lane change	<input type="checkbox"/> 23. Unable to determine					
<input type="checkbox"/> 6. Traffic signal	<input type="checkbox"/> 15. Use of improper lane	<input type="checkbox"/> 24. Left of center					
<input type="checkbox"/> 7. Exceeding speed limit	<input type="checkbox"/> 16. Improper turn	<input type="checkbox"/> 25. Right turn on red					
<input type="checkbox"/> 8. Exceeding safe speed	<input type="checkbox"/> 17. Improper or no signal	<input type="checkbox"/> 26. Other					
<input type="checkbox"/> 9. Failure to reduce speed	<input type="checkbox"/> 18. Improper vehicle equipment						

RESERVED FOR STATE USE		
24. Direction	Driver 1	Driver 2
25. Violation		
26. Misc. Action		
27. Charges		
28. Investigating Agency		

WIT- Name \_\_\_\_\_ Address \_\_\_\_\_ Phone No. ( ) \_\_\_\_\_

NESSSES: Name None At the time Address OF Report Phone No. ( ) \_\_\_\_\_

ARRESTS: Name \_\_\_\_\_ Charge(s) SAFE movement Violation

Name \_\_\_\_\_ Charge(s) \_\_\_\_\_

Sign Here Sgt. Officer's Rank and Name \_\_\_\_\_ Number \_\_\_\_\_ Police Dept. \_\_\_\_\_ 96 Date of Report



2 No. of Units Involved  
☒ Supplemental Report

THIS REPORT IS FOR THE USE OF THE DIVISION OF MOTOR VEHICLES. THE DATA IS COLLECTED FOR STATISTICAL ANALYSIS AND SUBSEQUENT HIGHWAY SAFETY PROGRAMMING. DETERMINATIONS OF "FAULT" ARE THE RESPONSIBILITY OF INSURERS OR OF THE STATE'S COURTS.

Do not write in these spaces  
**DATA REPORT**  
 Date Received by DMV

Date 96 MONTH DAY YEAR Day of Week \_\_\_\_\_ County \_\_\_\_\_ Time 11:42 (24 Hour Clock) Local Use / Patrol Area 2-3

LOCATION on \_\_\_\_\_ at \_\_\_\_\_  
 Collision occurred ☒ In \_\_\_\_\_ or \_\_\_\_\_ Miles ☐ ☐ ☐ ☐ outside municipality  
 Highway Number, or Highway, Street, (If ramp or service road, indicate on line) \_\_\_\_\_ (R.R. Crossing # \_\_\_\_\_) \_\_\_\_\_ Miles 0 ft. ☐ ☐ ☐ ☐  
 at \_\_\_\_\_ ST. toward \_\_\_\_\_ ST.  
 Use Highway Number, Street Name or Adjacent County or State Line N S E W Use Highway Number, Street Name or Adjacent County or State Line

☐ VEHICLE 1 ☐ HIT & RUN

Driver 1 \_\_\_\_\_  
 Address \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
 Same Address on Driver's License? ☐ Yes ☐ No Driver's Phone No. W ( ) H ( )  
 D.L.# \_\_\_\_\_ State \_\_\_\_\_ DOB \_\_\_\_\_  
 Vision 1. Obstruction \_\_\_\_\_ Physical 2. Condition \_\_\_\_\_ 3. Intoxication \_\_\_\_\_ Restrictions \_\_\_\_\_  
 Owner \_\_\_\_\_  
 Address \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
 VIN \_\_\_\_\_  
 Plate # \_\_\_\_\_ State \_\_\_\_\_ Year \_\_\_\_\_  
 Veh. Year \_\_\_\_\_ Veh. Make \_\_\_\_\_ Veh. Type Code \_\_\_\_\_  
 Commercial Vehicle ☐ Yes ☐ No Trailer Type Code \_\_\_\_\_  
 Air Bag ☐ Yes ☐ No 1st Trailer No. of Axles \_\_\_\_\_  
 Deployed ☐ Yes ☐ No Width \_\_\_\_\_ inches  
 Vehicle Drivable ☐ Yes ☐ No Length \_\_\_\_\_ feet  
 Post Crash Fire ☐ Yes ☐ No 2nd Trailer No. of Axles \_\_\_\_\_  
 Rollover ☐ Yes ☐ No Width \_\_\_\_\_ inches  
 Hazardous Cargo ☐ Yes ☐ No Length \_\_\_\_\_ feet  
 Spilled ☐ Yes ☐ No TAD \_\_\_\_\_  
 Crossed Median ☐ Yes ☐ No Est. Damage \$ \_\_\_\_\_  
 Removed to \_\_\_\_\_  
 By \_\_\_\_\_ Authority \_\_\_\_\_

☐ VEHICLE 2 ☐ PEDESTRIAN ☐ HIT & RUN ☐ OTHER

Driver 2 \_\_\_\_\_  
 Address \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
 Same Address on Driver's License? ☐ Yes ☐ No Driver's Phone No. W ( ) H ( )  
 D.L.# \_\_\_\_\_ State \_\_\_\_\_ DOB \_\_\_\_\_  
 Vision 1. Obstruction \_\_\_\_\_ Physical 2. Condition \_\_\_\_\_ 3. Intoxication \_\_\_\_\_ Restrictions \_\_\_\_\_  
 Owner \_\_\_\_\_  
 Address \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
 VIN \_\_\_\_\_  
 Plate # \_\_\_\_\_ State \_\_\_\_\_ Year \_\_\_\_\_  
 Veh. Year \_\_\_\_\_ Veh. Make \_\_\_\_\_ Veh. Type Code \_\_\_\_\_  
 Commercial Vehicle ☐ Yes ☐ No Trailer Type Code \_\_\_\_\_  
 Air Bag ☐ Yes ☐ No 1st Trailer No. of Axles \_\_\_\_\_  
 Deployed ☐ Yes ☐ No Width \_\_\_\_\_ inches  
 Vehicle Drivable ☐ Yes ☐ No Length \_\_\_\_\_ feet  
 Post Crash Fire ☐ Yes ☐ No 2nd Trailer No. of Axles \_\_\_\_\_  
 Rollover ☐ Yes ☐ No Width \_\_\_\_\_ inches  
 Hazardous Cargo ☐ Yes ☐ No Length \_\_\_\_\_ feet  
 Spilled ☐ Yes ☐ No TAD \_\_\_\_\_  
 Crossed Median ☐ Yes ☐ No Est. Damage \$ \_\_\_\_\_  
 Removed to \_\_\_\_\_  
 By \_\_\_\_\_ Authority \_\_\_\_\_

Other Property Damaged N/A Estimated Damage \$ N/A Owner Name N/A  
 Address \_\_\_\_\_

OCCUPANT SECTION INSTRUCTIONS: Give Injury Class, Belt/Helmet Usage, Race/Sex and Age of all occupants in the space corresponding to the seat occupied (see codes at top). Names and addresses are necessary for all occupants.

Seat	4. Inj. Class	5. Belt /Hel.	Race /Sex	Age	First Name	Injured Names and Addresses	Last Name	Seat	4. Inj. Class	5. Belt /Hel.	Race /Sex	Age	First Name	Injured Names and Addresses	Last Name
Left Front						DRIVER 1		Left Front						DRIVER 2, PEDESTRIAN, OTHER	
Center Front								Center Front							
Right Front								Right Front	K	I	F	4			
Left Rear								Left Rear							
Center Rear								Center Rear							
Right Rear								Right Rear							

Total Number Occupants \_\_\_\_\_ Total Number Injured \_\_\_\_\_ Total Number Occupants \_\_\_\_\_ Total Number Injured \_\_\_\_\_  
 Ambulance Requested ☐ Yes ☐ No If yes, Ambulance Arrived At N/A (24 Hour Clock)  
 Injured Taken To \_\_\_\_\_ (Treatment Facility and City or Town)

N.C. COLLISION REPORT FORM — Send To: N. C. Division of Motor Vehicles  
 Raleigh, N. C. 27697-0001

MARKS > < ADDED BY

(Initial)

POINTS OF INITIAL CONTACT (Write in Codes)		21 20 19 18 17		21 20 18 17 38 36 37		30	
VEH. 1	VEH. 2	1 2 3 4 5 6 7 8		1 2 3 4 5 6 7 8		27 28 29	
N/A	N/A						
ACCIDENT SEQUENCE		Passenger Cars/Small Trucks		Tractor-Trailers		Motorcycle, Bicycle or Moped	
6. Veh. Maneuver/Ped. Action		0. No Contact		25. Rollover		ROADWAY INFORMATION (See Front)	
7. First Harmful Event		22. From		24. Rear		11. Locality	
7. Most Harmful Event		23. Center		26. Unknown		12. Development Type	
8. Object Struck		Veh. 1		Veh. 2		13. Road Feature	
9. Distance to Object Struck		or Ped.		or Ped.		14. Road Character	
10. Vehicle Defects		Speed Limit (for each vehicle)		Estimated Original Traveling Speed		15. Road Class	
		Estimated Speed at Impact		Tire Impressions Before Impact (ft.)		16. Number of Lanes	
		Distance Traveled After Impact (ft.)				17. Road Configuration	
						18. Road Surface	
						19. Road Defects	
						20. Road Condition	
						21. Light Condition	
						22. Weather	
						23. Traffic Control	
						Operating Yes No	
						Visible Yes No	

INDICATE NORTH

SEE ORIGINAL REPORT

Vehicle 1 was Traveling ☐ N ☐ S ☐ E ☐ W on ☐ Vehicle 2 was Traveling ☐ N ☐ S ☐ E ☐ W on ☐

SCRIBE WHAT HAPPENED:

SEE ORIGINAL REPORT

CIRCUMSTANCES CONTRIBUTING TO THE COLLISION (Check as many as apply)						RESERVED FOR CITY OR OTHER USE	
DRIVER 1 DRIVER 2 DRIVER 1 DRIVER 2 DRIVER 1 DRIVER 2						SEE ORIGINAL	
<input type="checkbox"/> 1. None	<input type="checkbox"/> 10. Pass stopped school bus	<input type="checkbox"/> 19. Safe movement violation					
<input type="checkbox"/> 2. Alcohol use	<input type="checkbox"/> 11. Passing on hill	<input type="checkbox"/> 20. Following too closely					
<input type="checkbox"/> 3. Drug use	<input type="checkbox"/> 12. Passing on curve	<input type="checkbox"/> 21. Improper backing					
<input type="checkbox"/> 4. Yield	<input type="checkbox"/> 13. Other improper passing	<input type="checkbox"/> 22. Improper parking					
<input type="checkbox"/> 5. Stop sign	<input type="checkbox"/> 14. Improper lane change	<input type="checkbox"/> 23. Unable to determine					
<input type="checkbox"/> 6. Traffic signal	<input type="checkbox"/> 15. Use of improper lane	<input type="checkbox"/> 24. Left of center					
<input type="checkbox"/> 7. Exceeding speed limit	<input type="checkbox"/> 16. Improper turn	<input type="checkbox"/> 25. Right turn on red					
<input type="checkbox"/> 8. Exceeding safe speed	<input type="checkbox"/> 17. Improper or no signal	<input type="checkbox"/> 26. Other					
<input type="checkbox"/> 9. Failure to reduce speed	<input type="checkbox"/> 18. Improper vehicle equipment						
						24. Direction	
						25. Violation	
						26. Misc. Action	
						27. Charges	
						28. Investigating Agency	

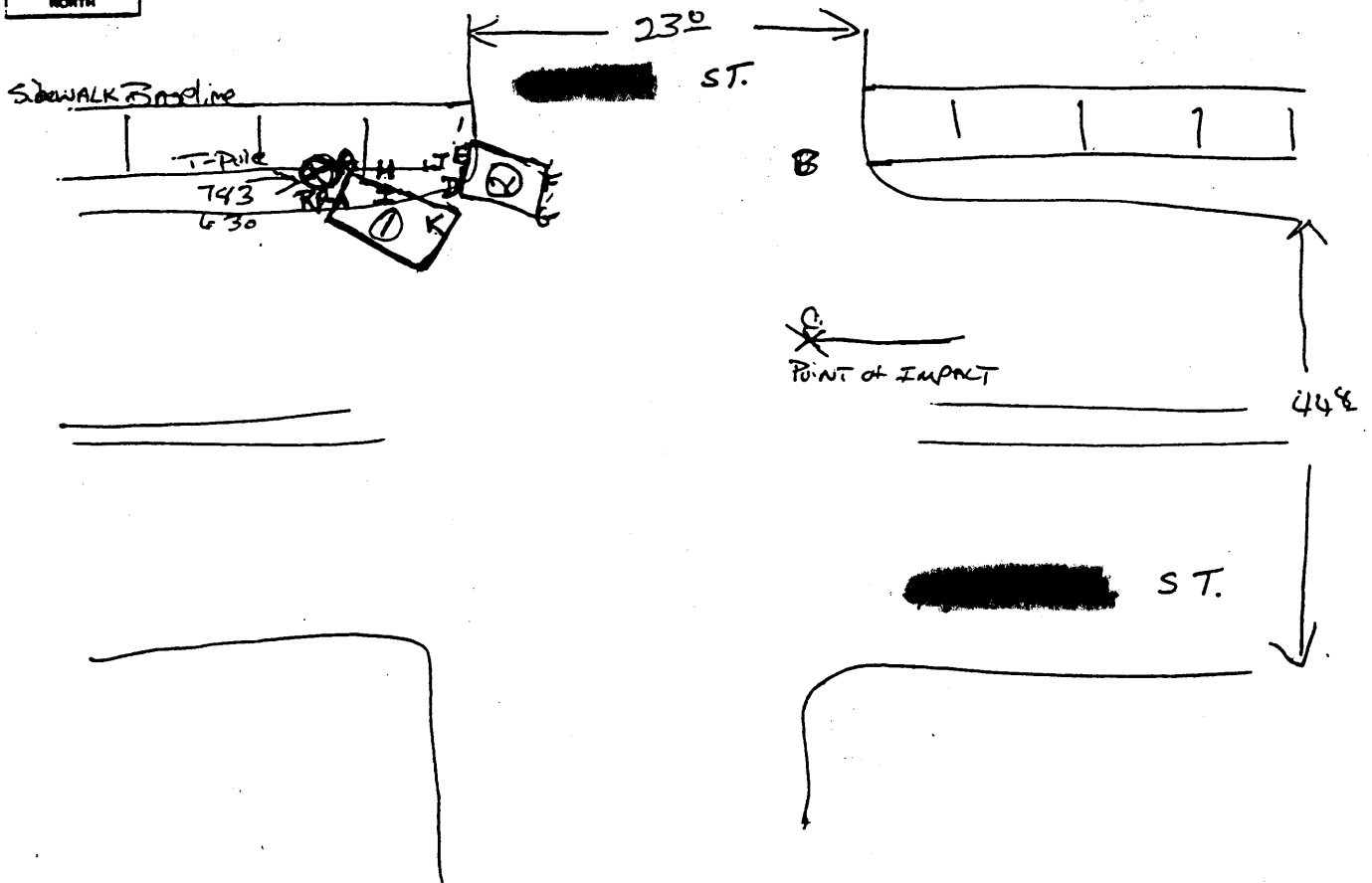
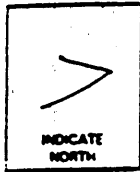
WIT. Name	Address	Phone No. ( )
NESSSES: Name	None at the time of Report	
ARRESTS: Name		
Name		
Sign Here	SGT. [Redacted]	Police Dept. [Redacted] 96
Officer's Rank and Name		Department
Number		Date of Report



# FIELD SKETCH

APPROX MEASUREMENTS

Field Sketch Prepared By SGT. [REDACTED]		Assisted By [REDACTED] TRP.	
Date Prepared [REDACTED] 96	Time Prepared 10:00	Photographs <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Taken By N/A



# ACCIDENT SCENE MEASUREMENTS

PT	FROM REF. PT.		FROM BASE LINE		ITEM MEASURED	SHOW DAMAGED AREA OF VEHICLE
	N	S	E	W		
A					A From RP-1 To Base line	
B	46 <sup>9</sup>				B From RP-1 To Baseline at Point of Impact	
C			10 <sup>5</sup>		C From B To Point of Impact in Roadway	
D	6 <sup>3</sup>				D From RP-1 To Baseline Veh. 2 F/R Tire	
E				3 <sup>1</sup>	E From Baseline D To F/R Tire Veh. 2	
F	15 <sup>11</sup>				F From RP-1 To Baseline at 1/2 Tire	
G			0 <sup>4</sup>		G From Baseline To Veh. 2 1/2 Tire	
H	3 <sup>6</sup>				H From RP-1 To Baseline AT F/R Tire Veh. 1	
I			0 <sup>4 1/2</sup>		I From Baseline To Veh. 1 F/R Tire	
J	11 <sup>1</sup>				J From RP-1 To Baseline AT Veh. 1 R/R Tire	
K			2 <sup>12</sup>		K From Baseline To Veh. 1 R/R Tire	
L					L	
M					M	
N					N	
O					O	
P					P	
Q					Q	
R					R	
S					S	
T					T	
U					U	
V					V	
W					W	
X					X	
Y					Y	
Z					Z	

Make 94 Ply.  
 Color GRN

Veh. # 2  
 Veh. # 3

Make \_\_\_\_\_  
 Color \_\_\_\_\_

If the coordinate measuring method is used, enter the direction N (North), S (South), etc., in the blocks provided at the top of the form under From Ref. Pt. and From Base Line. If the triangulation method is used, strike out Ref. Pt. and Base Line and enter RP1; RP2, at the top of the form.

If points to be located exceeds the spaces provided, continue listing points on the reverse side of this form. If more than three vehicles are involved, draw additional vehicles and show the damaged areas on the reverse side of this form.

Date of Accident	96
Time	11:42
County	
Hwy. # Occurred On	57
Sequence #	
Investigated By	SGT.



**ACCIDENT COLLISION MEASUREMENT TABLE**



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

## ACCIDENT COLLISION MEASUREMENT TABLE

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

Primary Sampling Unit Number 10

Case Number - Stratum 9612

### ACCIDENT COLLISION DIAGRAM

#### Document the physical plant:

- all road/roadway delineation (e.g., curbs/edge lines, lane markings, median markings, pavement markings, parked vehicles, poles, signs, etc.)
- all traffic controls (e.g., speed limit)
- north arrow placed on diagram
- roadway surface type and condition of applicable roadways
- grade measurements for all applicable roadways and at location of rollover initiation
- roadway curvature

#### Document vehicle dynamics including:

- reference point and reference line relative to physical features present at the scene
- scaled documentation of all accident induced physical evidence
- scaled documentation of all roadside objects contacted
- scaled representations of the vehicle(s) at pre-impact, impact, and final rest based upon either:
  - a) physical evidence, or
  - b) reconstructed accident dynamics

#### CRASH DATA

VEH. #1 VEH. #2 VEH. #3

Heading Angle 186 270 \_\_\_\_\_

Surface Type Bit Bit \_\_\_\_\_

Surface Condition DRY DRY \_\_\_\_\_

Coefficient of Friction .75 .75 \_\_\_\_\_

Grade (v/h) Measurement (between impact and final rest) Lev Lev \_\_\_\_\_

Grade (v/h) Measurement (at location of rollover initiation) N/A N/A \_\_\_\_\_

Reference Point: Utility Pole  
SW CORNER

Reference line: West EDGE  
of [REDACTED]

Item	Distance and Direction from Reference Point	Distance and Direction from Reference Line
<u>RP</u>		<u>.6</u>
<u>stop sign</u>		
<u>street sign</u>	<u>2.85 N</u>	<u>2.6 W</u>
<u>BEG F SKID</u>	<u>17.3 N</u>	<u>3.4 E</u>
<u>Impact</u>	<u>11 N</u>	<u>2.7 E</u>
<u>END</u>	<u>9.7 N</u>	<u>2.1 E</u>



Item	Distance and Direction from Reference Point	Distance and Direction from Reference Line
		Bottom out 1.5 x .7

**NASS CDS ACCIDENT FORM**





## ACCIDENT FORM

1. Primary Sampling Unit Number 10

2. Case Number - Stratum 9612

### IDENTIFICATION

3. Number of General Vehicle  
Forms Submitted 02

4. Date of Accident  
(Month, Day, Year) 9 6

5. Time of Accident 1142

Code reported military time of accident.

NOTE: Midnight = 2400  
Unknown = 9999

### SPECIAL STUDIES - INDICATORS

Check (✓) each special study (SS15-SS18 below) that has been completed; code 1 for the checked special studies and 0 for the special studies not checked.

6. 0 SS15 Administrative Use 0

7. 0 SS16 Pedestrian Crash Data Study 0

(Data for this special study available  
in a separate file.)

8. 0 SS17 Impact Fires 0

9. 0 SS18 Unsafe Driver Actions 0

10. 0 SS19 Run Off Road 0

### NUMBER OF EVENTS

11. Number of Recorded Events  
in This Accident 04

Code the number of events which occurred  
in this accident.

### ACCIDENT EVENTS

For each event that occurred in the accident, code the lowest numbered vehicle in the left columns and the other involved vehicle or object in the right columns.

Accident Event Sequence Number	Vehicle Number	Class Of Vehicle	General Area of Damage	Vehicle Number or Object Contacted	Class Of Vehicle	General Area of Damage
12. <u>0 1</u>	13. <u>01</u>	14. <u>20</u>	15. <u>F</u>	16. <u>02</u>	17. <u>03</u>	18. <u>R</u>
19. <u>0 2</u>	20. <u>02</u>	21. <u>03</u>	22. <u>F</u>	23. <u>51</u>	24. <u>00</u>	25. <u>0</u>
26. <u>0 3</u>	27. <u>01</u>	28. <u>20</u>	29. <u>F</u>	30. <u>61</u>	31. <u>00</u>	32. <u>0</u>
33. <u>0 4</u>	34. <u>01</u>	35. <u>20</u>	36. <u>F</u>	37. <u>50</u>	38. <u>00</u>	39. <u>0</u>
40. <u>0 5</u>	41. <u>    </u>	42. <u>    </u>	43. <u>    </u>	44. <u>    </u>	45. <u>    </u>	46. <u>    </u>

IF GREATER THAN FIVE EVENTS, CONTINUE CODING ON THE ACCIDENT EVENT SUPPLEMENT

### CODES FOR CLASS OF VEHICLE

- V2: 104.9 → 266
- |  |   |
|--|---|
| (00) Not a motor vehicle                         | (31) Large pickup truck (≤ 4,536 kgs GVWR)              |
| (01) Subcompact/mini (wheelbase < 254 cm)        | (38) Other pickup truck (≤ 4,536 kgs GVWR)              |
| (02) Compact (wheelbase ≥ 254 but < 265 cm)      | (39) Unknown pickup truck type (≤ 4,536 kgs GVWR)       |
| (03) Intermediate (wheelbase ≥ 265 but < 278 cm) | (45) Other light truck (≤ 4,536 kgs GVWR)               |
| (04) Full size (wheelbase ≥ 278 but < 291 cm)    | (48) Unknown light truck type (≤ 4,536 kgs GVWR)        |
| (05) Largest (wheelbase ≥ 291 cm)                | (49) Unknown light vehicle type                         |
| (09) Unknown passenger car size                  | (50) School bus (excludes van based) (> 4,536 kgs GVWR) |
| (14) Compact utility vehicle                     | (58) Other bus (> 4,536 kgs GVWR)                       |
| (15) Large utility vehicle (≤ 4,536 kgs GVWR)    | (59) Unknown bus type                                   |
| (16) Utility station wagon (≤ 4,536 kgs GVWR)    | (60) Truck (> 4,536 kgs GVWR)                           |
| (19) Unknown utility type                        | (67) Tractor without trailer                            |
| (20) Minivan (≤ 4,536 kgs GVWR) — CV             | (68) Tractor-trailer(s)                                 |
| (21) Large van (≤ 4,536 kgs GVWR)                | (78) Unknown medium/heavy truck type                    |
| (24) Van Based school bus (≤ 4,536 kgs GVWR)     | (79) Unknown light/medium/heavy truck type              |
| (28) Other van type (≤ 4,536 kgs GVWR)           | (80) Motored cycle                                      |
| (29) Unknown van type (≤ 4,536 kgs GVWR)         | (90) Other vehicle                                      |
| (30) Compact pickup truck (≤ 4,536 kgs GVWR)     | (99) Unknown  |

### CODES FOR GENERAL AREA OF DAMAGE (GAD)

- |   |                         |   |                         |
|---|-------------------------|---|-------------------------|
| CDS APPLICABLE<br>AND OTHER<br>VEHICLES | (O) Not a motor vehicle | (R) Right side  | (T) Top                 |
|   | (N) Noncollision        | (L) Left side   | (U) Undercarriage       |
|   | (F) Front               | (B) Back  | (9) Unknown             |
| TDC<br>APPLICABLE<br>VEHICLES           | (O) Not a motor vehicle | (L) Left side   | (C) Rear of cab         |
|   | (N) Noncollision        | (B) Back of unit with cargo area<br>(rear of trailer or straight truck) | (V) Front of cargo area |
|   | (F) Front               | (D) Back (rear of tractor)  | (T) Top                 |
|   | (R) Right side          |   | (U) Undercarriage       |
|   |                         |   | (9) Unknown             |

### CODES FOR VEHICLE NUMBER OR OBJECT CONTACTED

- |   |  |
|---|--|
| (01-30) — Vehicle Number  | (57) Fence   |
| Noncollision  | (58) Wall  |
| (31) Overturn — rollover (excludes end-over-end)                    | (59) Building  |
| (32) Rollover — end-over-end  | (60) Ditch or culvert  |
| (33) Fire or explosion  | (61) Ground  |
| (34) Jackknife  | (62) Fire hydrant  |
| (35) Other intraunit damage (specify):                              | (63) Curb  |
| _____   | (64) Bridge  |
| (36) Noncollision injury  | (68) Other fixed object (specify):   |
| (38) Other noncollision (specify):                                  | _____  |
| _____   | (69) Unknown fixed object  |
| (39) Noncollision — details unknown                                 | Collision with Nonfixed Object   |
| Collision With Fixed Object   | (70) Passenger car, light truck, van, or other vehicle<br>not in-transport |
| (41) Tree (≤ 10 cm in diameter)                                     | (71) Medium/heavy truck or bus not in-transport                            |
| (42) Tree (> 10 cm in diameter)                                     | (72) Pedestrian  |
| (43) Shrubbery or bush  | (73) Cyclist or cycle  |
| (44) Embankment   | (74) Other nonmotorist or conveyance                                       |
| (45) Breakaway pole or post (any diameter)                          | _____  |
| Nonbreakaway Pole or Post   | (75) Vehicle occupant  |
| (50) Pole or post (≤ 10 cm in diameter)                             | (76) Animal  |
| (51) Pole or post (> 10 cm but ≤ 30 cm in diameter)                 | (77) Train   |
| (52) Pole or post (> 30 cm in diameter)                             | (78) Trailer, disconnected in transport                                    |
| (53) Pole or post (diameter unknown)                                | (79) Object fell from vehicle in-transport                                 |
| _____   | (88) Other nonfixed object (specify):                                      |
| (54) Concrete traffic barrier                                       | _____  |
| (55) Impact attenuator  | (89) Unknown nonfixed object   |
| (56) Other traffic barrier (includes guardrail)<br>(specify): _____ | (98) Other event (specify):  |
|   | _____  |
|   | (99) Unknown event or object   |



**NASS CDS VEHICLE FORMS: CASE VEHICLE**



## GENERAL VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number 10  
2. Case Number - Stratum 9612  
3. Vehicle Number 01

### VEHICLE IDENTIFICATION

4. Vehicle Model Year 94  
Code the last two digits of the model year  
(99) Unknown
5. Vehicle Make (specify): D Plymouth 09  
Applicable codes are found in your  
NASS Data Collection, Coding and  
Editing Manual.  
(99) Unknown
6. Vehicle Model (specify): Voyager 442  
Applicable codes are found in your  
NASS Data Collection, Coding and  
Editing Manual.  
(999) Unknown
7. Body Type 20  
Note: Applicable codes may be found on  
the back of this page.
8. Vehicle Identification Number 2P4GH2538RB  
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17  
Left justify; Slash zeros and letter Z (0 and Z)  
No VIN—Code all zeros Unknown—Code all nines
9. Vehicle Special Use (This Trip) 0  
(0) No special use  
(1) Taxi  
(2) Vehicle used as school bus  
(3) Vehicle used as other bus  
(4) Military  
(5) Police  
(6) Ambulance  
(7) Fire truck or car  
(8) Other (specify):  
(9) Unknown

### OFFICIAL RECORDS

10. Police Reported Vehicle Disposition 1  
(0) Not towed due to vehicle damage  
(1) Towed due to vehicle damage  
(9) Unknown
11. Police Reported Travel Speed 048  
Code to the nearest kmph (NOTE: 000 means  
less than 0.5 kmph)  
(160) 159.5 kmph and above  
(999) Unknown  
30 mph X 1.6093 = 48 kmph

12. Speed Limit 056  
(000) No statutory limit  
Code posted or statutory speed limit  
in kmph  
(999) Unknown  
35 mph X 1.6093 = 056 kmph
13. Police Reported Alcohol Presence For Driver 0  
(0) No alcohol present  
(1) Yes alcohol present  
(7) Not reported  
(8) No driver present  
(9) Unknown
14. Alcohol Test Result For Driver 96  
Code actual value (decimal implied  
before first digit—0.xx)  
(95) Test refused  
(96) None given  
(97) AC test performed, results unknown  
(98) No driver present  
(99) Unknown  
Source: PAR
15. Police Reported Other Drug Presence For Driver 0  
(0) No other drug(s) present  
(1) Yes other drug(s) present  
(7) Not reported  
(8) No driver present  
(9) Unknown
16. Other Drug Specimen Test Result For Driver 0  
(0) No specimen test given  
(1) Drug(s) not found in specimen  
(2) Drug(s) found in specimen, (specify):  
(3) Specimen test given, results unknown or not  
obtained  
(8) No driver present  
(9) Unknown if specimen test given
17. Driver's Zip Code [REDACTED]  
(00001) Driver not a resident of U.S. or territories  
Code actual 5-digit zip code  
(99998) No driver present  
(99999) Unknown
18. Driver's Race/Ethnic Origin 5  
(1) White (non-Hispanic)  
(2) Black (non-Hispanic)  
(3) White (Hispanic)  
(4) Black (Hispanic)  
(5) American Indian, Eskimo or Aleut  
(6) Asian or Pacific Islander  
(7) Other (specify):  
(8) No driver present  
(9) Unknown



# CODES FOR BODY TYPE

## CDS APPLICABLE VEHICLES

### Automobiles

- (01) Convertible (excludes sun-roof, t-bar)
- (02) 2-door sedan, hardtop, coupe
- (03) 3-door/2-door hatchback
- (04) 4-door sedan, hardtop
- (05) 5-door/4-door hatchback
- (06) Station wagon (excluding van and truck based)
- (07) Hatchback, number of doors unknown
- (08) Other automobile type (specify): \_\_\_\_\_
- (09) Unknown automobile type

### Automobile Derivatives

- (10) Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup)
- (11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
- (12) Large limousine - more than four side doors, or stretched chassis
- (13) Three-wheel automobile or automobile derivative

### Utility Vehicles ( $\leq 4,500$ kgs GVWR)

- (14) Compact utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [76 and before], Explorer, S-10 Blazer, Geo Tracker, Bravada, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Passport, Samurai, Sidekick, Rocky)
- (15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Hummer, Landcruiser, Rover, Scout, Yukon)
- (16) Utility station wagon (Chevy Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine)
- (19) Utility, unknown body type

### Van Based Light Trucks ( $\leq 4,500$ kgs GVWR)

- (20) Minivan (Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Vista, Aerostar, Windstar, Villager, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Quest, Mitsubishi Minivan, Expo Wagon, Vanagon/Camper.)
- (21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura.)
- (22) Step van or walk-in van ( $\leq 4,500$  kgs GVWR)
- (23) Van based motorhome ( $\leq 4,500$  kgs GVWR)
- (24) Van based school bus ( $\leq 4,500$  kgs GVWR)
- (25) Van based other bus ( $\leq 4,500$  kgs GVWR)
- (28) Other van type (Hi-Cube Van, Kary) (specify): \_\_\_\_\_
- (29) Unknown van type

### Light Conventional Trucks (Pickup style cab, $\leq 4,500$ kgs GVWR)

- (30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
- (31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500, T100)

- (32) Pickup with slide-in camper
- (33) Convertible pickup
- (39) Unknown pickup style light conventional truck type

### Other Light Trucks ( $\leq 4,500$ kgs GVWR)

- (40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
- (41) Truck based panel
- (42) Light truck based motorhome (chassis mounted)
- (45) Other light conventional truck type
- (48) Unknown light truck type
- (49) Unknown light vehicle type (automobile, utility, van, or light truck)

## OTHER VEHICLES

### Buses (Excludes Van Based)

- (50) School bus (designed to carry students, not cross country or transit)
- (58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify): \_\_\_\_\_
- (59) Unknown bus type

### Medium/Heavy Trucks ( $> 4,500$ kgs GVWR)

- (60) Step van ( $> 4,500$  kgs GVWR)
- (61) Single unit straight truck ( $4,500$  kgs  $<$  GVWR  $\leq 8,850$  kgs)
- (62) Single unit straight truck ( $8,850$  kgs  $<$  GVWR  $\leq 12,000$  kgs)
- (63) Single unit straight truck ( $> 12,000$  kgs GVWR)
- (64) Single unit straight truck, GVWR unknown
- (65) Medium/heavy truck based motorhome
- (67) Truck-tractor with no cargo trailer
- (68) Truck-tractor pulling one trailer
- (69) Truck-tractor pulling two or more trailers
- (70) Truck-tractor (unknown if pulling trailer)
- (78) Unknown medium/heavy truck type
- (79) Unknown truck type (light/medium/heavy)

### Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)

- (80) Motorcycle
- (81) Moped (motorized bicycle)
- (82) Three-wheel motorcycle or moped
- (88) Other motored cycle (minibike, motorscooter) (specify): \_\_\_\_\_
- (89) Unknown motored cycle type

### Other Vehicles

- (90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
- (91) Snowmobile
- (92) Farm equipment other than trucks
- (93) Construction equipment other than trucks
- (97) Other vehicle type
- (99) Unknown body type

**PRECRASH ENVIRONMENTAL DATA**

19. Relation To Interchange Or Junction 2  
 (0) Non-interchange area and non-junction  
 (1) Interchange area related

*Non-Interchange junctions*

- (2) Intersection related  
 (3) Driveway, alley access related  
 (4) Other junction (specify): \_\_\_\_\_

(5) \_\_\_\_\_  
 Unknown type of junction

(9) Unknown

20. Trafficway Flow 0  
 (0) Not physically divided (two way traffic)  
 (1) Divided trafficway-median strip without positive barrier  
 (2) Divided trafficway-median strip with positive barrier  
 (3) One way traffic  
 (9) Unknown

21. Number Of Travel Lanes 2

- (1) One  
 (2) Two  
 (3) Three  
 (4) Four  
 (5) Five  
 (6) Six  
 (7) Seven or more  
 (9) Unknown

22. Roadway Alignment 1

- (1) Straight  
 (2) Curve right  
 (3) Curve left  
 (9) Unknown

23. Roadway Profile 1

- (1) Level  
 (2) Uphill grade (> 2%)  
 (3) Hill crest  
 (4) Downhill grade (> 2%)  
 (5) Sag  
 (9) Unknown

24. Roadway Surface Type 2

- (1) Concrete  
 (2) Bituminous (asphalt)  
 (3) Brick or block  
 (4) Slag, gravel, or stone  
 (5) Dirt  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

25. Roadway Surface Condition 1

- (1) Dry  
 (2) Wet  
 (3) Snow or slush  
 (4) Ice  
 (5) Sand, dirt, or oil  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

26. Light Conditions 1

- (1) Daylight  
 (2) Dark  
 (3) Dark, but lighted  
 (4) Dawn  
 (5) Dusk  
 (9) Unknown

27. Atmospheric Conditions 0

- (0) No adverse atmospheric-related driving conditions  
 (1) Rain  
 (2) Sleet/hail  
 (3) Snow  
 (4) Fog  
 (5) Rain and fog  
 (6) Sleet and fog  
 (7) Other (e.g., smog, smoke, blowing sand or dust, etc.) (specify): \_\_\_\_\_  
 (9) Unknown

28. Traffic Control Device 0

- (0) No traffic control(s)  
 (1) Traffic control signal (not RR crossing)

*Regulatory*

- (2) Stop sign  
 (3) Yield sign  
 (4) School zone sign  
 (5) Other regulatory sign (specify): \_\_\_\_\_

(6) Warning sign (not RR crossing)

(7) Unknown sign

(8) Miscellaneous/other controls including RR controls (specify): \_\_\_\_\_

(9) Unknown

29. Traffic Control Device Functioning 0

- (0) No traffic control device  
 (1) Traffic control device not functioning (specify): \_\_\_\_\_  
 (2) Traffic control device functioning properly  
 (9) Unknown



**PRECRASH DRIVER RELATED DATA****30. Driver's Distraction/Inattention To Driving** 99  
(Prior To Recognition Of Critical Event)

- (00) No driver present  
 (01) Attentive or not distracted  
 (02) Looked but did not see

*Distractions*

(03) By other occupant(s), (specify): \_\_\_\_\_

(04) By moving object in vehicle (specify): \_\_\_\_\_

(05) While talking or listening to cellular phone  
(specify location and type of phone): \_\_\_\_\_(06) While dialing cellular phone (specify location  
and type of phone): \_\_\_\_\_

(07) While adjusting climate controls

(08) While adjusting radio, cassette, CD (specify): \_\_\_\_\_

(09) While using other device/object in vehicle  
(specify): \_\_\_\_\_

(10) Sleepy or fell asleep

(11) Distracted by outside person, object, or event  
(specify): \_\_\_\_\_

(12) Eating or drinking

(13) Smoking related

(97) Distracted/inattentive, details unknown

(98) Other, distraction (specify): \_\_\_\_\_

(99) Unknown

**31. Pre-Event Movement** 01  
(Prior to Recognition of Critical Event)

- (00) No driver present  
 (01) Going straight  
 (02) Decelerating in traffic lane  
 (03) Accelerating in traffic lane  
 (04) Starting in traffic lane  
 (05) Stopped in traffic lane  
 (06) Passing or overtaking another vehicle  
 (07) Disabled or parked in travel lane  
 (08) Leaving a parking position  
 (09) Entering a parking position  
 (10) Turning right  
 (11) Turning left  
 (12) Making a U-turn  
 (13) Backing up (other than for parking position)  
 (14) Negotiating a curve  
 (15) Changing lanes  
 (16) Merging  
 (17) Successful avoidance maneuver to a previous  
critical event  
 (97) Other (specify): \_\_\_\_\_  
 (99) Unknown

**32. Critical Precrash Event** 66*This Vehicle Loss of Control Due To:*

- (01) Blow out or flat tire  
 (02) Stalled engine  
 (03) Disabling vehicle failure (e.g., wheel fell off)  
(specify): \_\_\_\_\_  
 (04) Non-disabling vehicle problem (e.g., hood flew  
up) (specify): \_\_\_\_\_  
 (05) Poor road conditions (puddle, pot hole, ice, etc.)  
(specify): \_\_\_\_\_  
 (06) Traveling too fast for conditions  
 (08) Other cause of control loss (specify): \_\_\_\_\_  
 (09) Unknown cause of control loss

*This Vehicle Traveling*

- (10) Over the lane line on left side of travel lane  
 (11) Over the lane line on right side of travel lane  
 (12) Off the edge of the road on the left side  
 (13) Off the edge of the road on the right side  
 (14) End departure  
 (15) Turning left at intersection  
 (16) Turning right at intersection  
 (17) Crossing over (passing through) intersection  
 (18) This vehicle decelerating  
 (19) Unknown travel direction

*Other Motor Vehicle In Lane*

- (50) Other vehicle stopped  
 (51) Traveling in same direction with lower steady  
speed  
 (52) Traveling in same direction while decelerating  
 (53) Traveling in same direction with higher speed  
 (54) Traveling in opposite direction  
 (55) In crossover  
 (56) Backing  
 (59) Unknown travel direction of other motor  
vehicle in lane

*Other Motor Vehicle Encroaching Into Lane*

- (60) From adjacent lane (same direction)—over left  
lane line  
 (61) From adjacent lane (same direction)—over right  
lane line  
 (62) From opposite direction—over left lane line  
 (63) From opposite direction—over right lane line  
 (64) From parking lane  
 (65) From crossing street, turning into same  
direction  
 (66) From crossing street, across path  
 (67) From crossing street, turning into opposite  
direction  
 (68) From crossing street, intended path not known  
 (70) From driveway, turning into same direction  
 (71) From driveway, across path  
 (72) From driveway, turning into opposite direction  
 (73) From driveway, intended path not known  
 (74) From entrance to limited access highway  
 (78) Encroachment by other vehicle—details  
unknown

*Pedestrian, Pedalcyclist, or Other Nonmotorist*

- (80) Pedestrian in roadway  
 (81) Pedestrian approaching roadway  
 (82) Pedestrian—unknown location  
 (83) Pedalcyclist or other nonmotorist in roadway  
(specify): \_\_\_\_\_  
 (84) Pedalcyclist or other nonmotorist approaching  
roadway, (specify): \_\_\_\_\_  
 (85) Pedalcyclist or other nonmotorist—unknown  
location (specify): \_\_\_\_\_

*Object or Animal*

- (87) Animal in roadway  
 (88) Animal approaching roadway  
 (89) Animal—unknown location  
 (90) Object in roadway  
 (91) Object approaching roadway  
 (92) Object—unknown location  
 (98) Other critical precrash event (specify): \_\_\_\_\_  
 (99) Unknown

33. Attempted Avoidance Maneuver 09

- (00) No driver present
- (01) No avoidance maneuver
- (02) Braking (no lockup)
- (03) Braking (lockup)
- (04) Braking (lockup unknown)
- (05) Releasing brakes
- (06) Steering left
- (07) Steering right
- (08) Braking and steering left
- (09) Braking and steering right *with lockup*
- (10) Accelerating
- (11) Accelerating and steering left
- (12) Accelerating and steering right
- (98) Other action (specify):

(99) Unknown

34. Pre-Impact Stability 2

- (0) No driver present
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30 degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify):
- (9) Precrash stability unknown

35. Pre-Impact Location 1

- (0) No driver present
- (1) Stayed in original travel lane
- (2) Stayed on roadway but left original travel lane
- (3) Stayed on roadway, not known if left original travel lane
- (4) Departed roadway
- (5) Remained off roadway
- (6) Returned to roadway
- (7) Entered roadway
- (9) Unknown

36. Accident Type 86

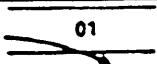
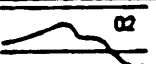


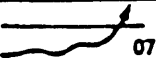

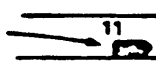


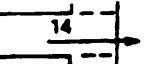
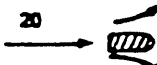
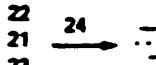
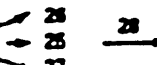
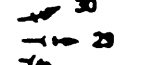
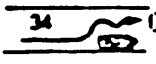
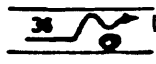

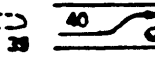
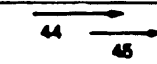
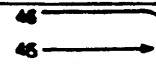
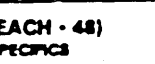
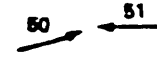
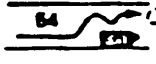





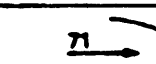
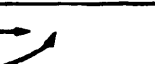
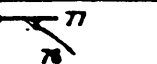
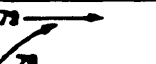
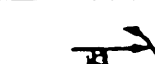
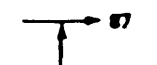

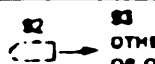

(Note: Applicable codes on back of this page)

- (00) No impact
- Code the number of the diagram that best describes the accident circumstance
- (98) Other accident type (specify):

(99) Unknown

**STOP HERE IF GV07 DOES NOT EQUAL 01 - 49**



Category	Configuration	ACCIDENT TYPES (Includes Intent)				
I Single Driver	A Right Roadside Departure	 01 DRIVE OFF ROAD	 02 CONTROL/ TRACTION LOSS	 03 AVOID COLLISION WITH VEH., PED., ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN
	B Left Roadside Departure	 06 DRIVE OFF ROAD	 07 CONTROL/ TRACTION LOSS	 08 AVOID COLLISION WITH VEH., PED., ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN
	C Forward Impact	 11 PARKED VEH.	 12 STA. OBJECT	 13 PEDESTRIAN/ ANIMAL	 14 END DEPARTURE	15 SPECIFICS OTHER 16 SPECIFICS UNKNOWN
II Same Trafficway Same Direction	D Rear-End	 20 STOPPED 21, 22, 23	 22 SLOWER 24, 25, 27	 24 DECEL. 26, 28, 31	 26 AVOID COLLISION WITH VEH.	(EACH - 32) SPECIFICS OTHER (EACH - 33) SPECIFICS UNKNOWN
	E Forward Impact	 34 CONTROL/ TRACTION LOSS	 36 CONTROL/ TRACTION LOSS	 38 AVOID COLLISION WITH VEH.	 40 AVOID COLLISION WITH OBJECT	(EACH - 42) SPECIFICS OTHER (EACH - 43) SPECIFICS UNKNOWN
	F Sideswipe Angle	 44 LATERAL MOVE	 46 AVOID COLLISION WITH VEH.	 48 AVOID COLLISION WITH OBJECT	(EACH - 48) SPECIFICS OTHER (EACH - 49) SPECIFICS UNKNOWN	
III Same Trafficway Opposite Direction	G Head-On	 50 LATERAL MOVE	(EACH - 52) SPECIFICS OTHER	(EACH - 53) SPECIFICS UNKNOWN		
	H Forward Impact	 54 CONTROL/ TRACTION LOSS	 56 CONTROL/ TRACTION LOSS	 58 AVOID COLLISION WITH VEH.	 60 AVOID COLLISION WITH OBJECT	(EACH - 62) SPECIFICS OTHER (EACH - 63) SPECIFICS UNKNOWN
	I Sideswipe Angle	 64 LATERAL MOVE	(EACH - 66) SPECIFICS OTHER	(EACH - 67) SPECIFICS UNKNOWN		
IV Change Trafficway Vehicle Turning	J Turn Across Path	 68 INITIAL OPPOSITE DIRECTIONS	 70 INITIAL SAME DIRECTIONS	 72 INITIAL SAME DIRECTIONS	(EACH - 74) SPECIFICS OTHER (EACH - 75) SPECIFICS UNKNOWN	
	K Turn Into Path	 76 TURN INTO SAME DIRECTION	 78 TURN INTO OPPOSITE DIRECTIONS	 80 TURN INTO OPPOSITE DIRECTIONS	(EACH - 84) SPECIFICS OTHER (EACH - 85) SPECIFICS UNKNOWN	
V Intersecting Paths (Vehicle Damage)	L Straight Paths	 86 SPECIFICS OTHER	 88 SPECIFICS OTHER	(EACH - 90) SPECIFICS OTHER	(EACH - 91) SPECIFICS UNKNOWN	
VI Miscellaneous	M Backing Etc	 92 BACKING VEH.	 94 OTHER VEH. OR OBJECT	96 Other Accident Type 98 Unknown Accident Type 00 No Impact		

**OCCUPANT RELATED**

37. Driver Presence in Vehicle 1  
 (0) Driver not present  
 (1) Driver present  
 (9) Unknown
38. Number of Occupants This Vehicle 04  
 (00-96) Code actual number of occupants for this vehicle  
 (97) 97 or more  
 (99) Unknown
39. Number of Occupant Forms Submitted 04

**AIR BAG RELATED**

40. Is this an AOPS Vehicle? 1  
 (0) No (includes unknown)  
 (1) Yes - researcher determined  
 (2) VIN determined air bag system  
 (3) VIN determined automatic (passive) belts  
 (4) VIN determined air bag and automatic (passive) belts
41. Air Bag(s) Deployment, First Seat Frontal 6  
 (0) Not equipped or not available  
 (1) No air bags deployed  
*Single Air Bag Vehicle*  
 (2) Driver air bag deployed  
 (3) Driver air bag, unknown if deployed  
*Multiple Air Bag Vehicle*  
 (4) Driver side only deployed  
 (5) Passenger side only deployed  
 (6) Driver and passenger side deployed  
 (7) Driver and passenger side unknown if deployed  
 (8) Air bag(s) deployed, details unknown  
 (9) Unknown
42. Air Bag(s) Deployment, Other Than First Seat Frontal 0  
 (0) Not equipped with an "other" air bag  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

Specify type of "other" air bag present: \_\_\_\_\_

**VEHICLE WEIGHT ITEMS**

43. Vehicle Curb Weight 1.650  
 Code weight to nearest 10 kilograms.  
 (045) Less than 450 kilograms  
 (610) 6,100 kilograms or more  
 (999) Unknown  
3635 lbs X .4536 = 1649 kgs

Source: \_\_\_\_\_

44. Vehicle Cargo Weight 0.010  
 Code weight to nearest 10 kilograms.  
 (000) Less than 5 kilograms  
 (450) 4,500 kilograms or more  
 (999) Unknown  
25 lbs X .4536 = 11 kgs

Source: \_\_\_\_\_

**ROLLOVER DATA**

45. Rollover 00  
 (00) No rollover (no overturning)  
*Rollover (primarily about the longitudinal axis)*  
 (01-16) Code the number of quarter turns  
 (17) Rollover, 17 or more quarter turns (specify): \_\_\_\_\_  
 (98) Rollover--end-over-end (i.e., primarily about the lateral axis)  
 (99) Rollover (overturn), details unknown
46. Rollover Initiation Type 00  
 (00) No rollover  
 (01) Trip-over  
 (02) Flip-over  
 (03) Turn-over  
 (04) Climb-over  
 (05) Fall-over  
 (06) Bounce-over  
 (07) Collision with another vehicle  
 (08) Other rollover initiation type specify): \_\_\_\_\_  
 (98) Rollover--end-over-end  
 (99) Unknown rollover initiation type
47. Location of Rollover Initiation 0  
 (0) No rollover  
 (1) On roadway  
 (2) On shoulder--paved  
 (3) On shoulder--unpaved  
 (4) On roadside or divided trafficway median  
 (8) Rollover--end-over-end  
 (9) Unknown
48. Rollover Initiation Object Contacted 00  
 (Note: Applicable codes on back of page)
49. Location on Vehicle Where Initial Principal Tripping Force Is Applied 0  
 (0) No rollover  
 (1) Wheels/tires  
 (2) Side plane  
 (3) End plane  
 (4) Undercarriage  
 (5) Other location on vehicle (specify): \_\_\_\_\_  
 (6) Non-contact rollover forces (specify): \_\_\_\_\_  
 (8) Rollover--end-over-end  
 (9) Unknown
50. Direction of Initial Roll 0  
 (0) No rollover  
 (1) Roll right - primarily about the longitudinal axis  
 (2) Roll left - primarily about the longitudinal axis  
 (8) Rollover--end-over-end  
 (9) Unknown roll direction



**VERRIDE/UNDERRIDE (THIS VEHICLE)**

51. Front Override/Underride (this Vehicle) 0
52. Rear Override/Underride (this Vehicle) 0
- (0) No override/underride, or not an end-to-end impact between two CDS applicable vehicles, and no medium/heavy truck or bus underride

*Override (see specific CDC)**[Between 2 CDS applicable vehicles (Bodytype, GV07 = 1-49)]*

- (1) 1st CDC
- (2) 2nd CDC
- (3) Other not automated CDC (specify):  
\_\_\_\_\_

*Underride (see specific CDC)**[Between 2 CDS applicable vehicles (Bodytype, GV07 = 1-49)]*

- (4) 1st CDC
- (5) 2nd CDC
- (6) Other not automated CDC (specify):  
\_\_\_\_\_

- (7) Medium/heavy truck or bus override (of any configuration)
- (9) Unknown

**HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V**

Values: (000)-(359) Code actual value

- (997) Noncollision
- (998) Impact with object
- (999) Unknown

53. Heading Angle For This Vehicle 186
54. Heading Angle For Other Vehicle 270

**RECONSTRUCTION DATA**

55. Towed Trailing Unit 0
- (0) No towed unit
- (1) Yes—towed trailing unit
- (9) Unknown
56. Documentation of Trajectory Data for This Vehicle 1
- (0) No
- (1) Yes
57. Post Collision Condition of Tree or Pole (For Highest Delta V) 0
- (0) Not collision (for highest delta V) with tree or pole
- (1) Not damaged
- (2) Cracked/sheared
- (3) Tilted < 45 degrees
- (4) Tilted ≥ 45 degrees
- (5) Uprooted tree
- (6) Separated pole from base
- (7) Pole replaced
- (8) Other (specify):  
\_\_\_\_\_
- (9) Unknown

**ACCIDENT RECONSTRUCTION PROGRAMS HIGHEST DELTA V**

58. Basis for Total (Resultant) Delta V (highest) 01

(00) No vehicle inspection

*Delta V Calculated*

- (01) Reconstruction program -damage only routine
- (02) Reconstruction program -damage and trajectory routine
- (03) Missing vehicle algorithm

*Delta V Not Calculated*

- (04) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.

*All vehicles within scope (CDC applicable) of reconstruction program but one of the collision conditions is beyond the scope of the reconstruction program or other acceptable reconstruction technique, regardless of adequacy of damage data.*

- (05) Rollover
- (06) Other non-horizontal forces
- (07) Sideswipe type damage
- (08) Severe override
- (09) Yielding object
- (10) Overlapping damage
- (11) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available, (specify):  
\_\_\_\_\_  
\_\_\_\_\_

- (98) Other, (specify):  
\_\_\_\_\_  
\_\_\_\_\_

## COMPUTER GENERATED CRASH SEVERITY

59. Total Delta V

12.7 Nearest kmph (highest)           Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)  
 (160) 159.5 kmph and above  
 (999) Unknown

60. Longitudinal Component of Delta V

-11.9 Nearest kmph (highest)           Nearest kmph (secondary)

(NOTE:   000 means greater than  
 -0.5 kmph and less than +0.5 kmph)  
 (± 160) ± 159.5 kmph and above  
 (   999) Unknown

61. Lateral Component of Delta V

+4.3 Nearest kmph (highest)           Nearest kmph (secondary)

(NOTE:   000 means greater than -0.5 kmph  
 and less than +0.5 kmph)  
 (± 160) ± 159.5 kmph and above  
 (   999) Unknown

62. Energy Absorption

25636 Nearest 100 joules (highest)           Nearest 100 joules (secondary)

(NOTE: 0000 means less than 50 joules)  
 (9997) 999,650 joules or more  
 (9999) Unknown

63. Impact Speed

998 Nearest kmph (highest)           Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)  
 (160) 159.5 kmph and above  
 (998) Trajectory algorithm not run  
 (999) Unknown

## DELTA V CONFIDENCE LEVEL

64. Confidence In Reconstruction Program Results (For Highest Delta V)

- (0) No reconstruction 1  
 (1) Collision fits model — results appear reasonable  
 (2) Collision fits model — results appear high  
 (3) Collision fits model — results appear low  
 (4) Borderline reconstruction — results appear reasonable

## OTHER SPEED ESTIMATE

65. Barrier Equivalent Speed

16.4 Nearest kmph (highest)           Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)  
 (160) 159.5 kmph and above  
 (999) Unknown

IS MISSING VEHICLE ALGORITHM APPLICABLE FOR THIS VEHICLE? [ ] YES [X] NO

IF YES: IS A COMPLETED PROGRAM SUMMARY INCLUDED? [ ] YES [ ] NO



## ESTIMATED DELTA V

## VEHICLE INSPECTION

66. Estimated Highest Delta V (Researcher Determined)

(0) Reconstruction Delta V coded

*Estimated Delta V*

(1) Less than 10 kmph

(2)  $\geq 10$  kmph but  $< 25$  kmph

(3)  $\geq 25$  kmph but  $< 40$  kmph

(4)  $\geq 40$  kmph but  $< 55$  kmph

(5)  $\geq 55$  kmph

*Other estimates of damage severity*

(6) Minor

(7) Moderate

(8) Severe

(9) Unknown

67. Type of Vehicle Inspection

(0) No inspection

(1) Vehicle fully repaired-no damage evident

(2) Partial inspection (specify):

(3) Complete inspection

\*\*\* IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV67=0), \*\*\*

DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS

\*\*\* IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE \*\*\*

THE EXTERIOR VEHICLE, INTERIOR VEHICLE,  
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.

## EXTERIOR VEHICLE FORM

**NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM**

1. Primary Sampling Unit Number	<u>10</u>	3. Vehicle Number	<u>01</u>
2. Case Number - Stratum	<u>9612</u>		

## VEHICLE IDENTIFICATION

VIN 2P4GH2538RR \_\_\_\_\_ Model Year 94  
Vehicle Make (specify): Plymouth Vehicle Model (specify): Voyager

## LOCATOR

Locate the end of the damage with respect to the vehicle's damaged center point or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L	Location of Max Crush
01	BC to BC	across front END	C1
03	35cm @ of center	→ SAME	

### CRUSH PROFILE IN CENTIMETERS

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

Use as many lines/columns as necessary to describe each damage profile.

[illegible]

# ORIGINAL SPECIFICATIONS WORK SHEET

Wheelbase 112.3 inches x 2.54 = 285.2 cm  
 Overall Length 178.1 inches x 2.54 = 452.4 cm  
 Maximum Width 72.0 inches x 2.54 = 182.9 cm  
 Curb Weight 3,635 pounds x 0.4536 = 1,648.8 kg  
 Average Track 61.0 inches x 2.54 = 154.9 cm  
 Front Overhang 33.9 inches x 2.54 = 86.1 cm  
 Rear Overhang 32.3 inches x 2.54 = 82.0 cm  
 Undeformed End Width 60.6 inches x 2.54 = 153.9 cm  
 Engine Size: cyl/displ.          cc x 0.001 = 3.0 L  
 V6 3.0 181 CID x 0.0164 = 3.0 L

7-Passengers

Shipping Weight

3535  
100

3635

## SPECIAL CRASH INVESTIGATION ADDENDUM

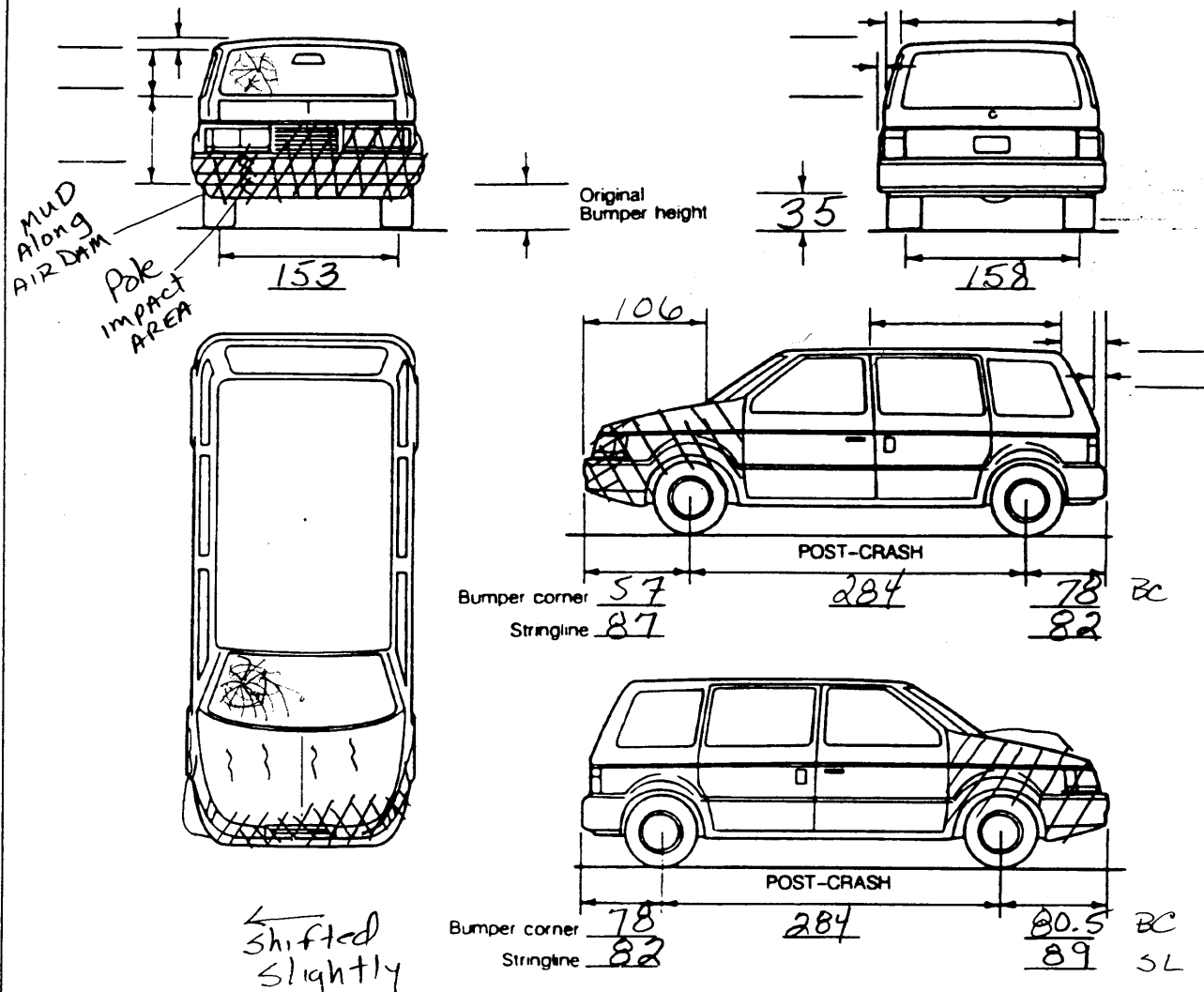
Submodel Designation: {specify} Color: {specify} Blue Repair Cost: \$  
 Transmission: {circle} Automatic Manual Speed: 3-speed 4-speed 5-speed | Other:  
 Steering: {circle} Power-assisted Manual Type: rack-and-pinion worm-and-gear | Other  
 {please describe}:  
 Brakes: {circle} Power-assisted Manual Type: 4-wheel disc | 4-wheel drum | 4-wheel hydraulic  
front disc, rear drum Other:  
 Observed Defects: {specify}  
 Fleet Type: {circle} Private vehicle Rental vehicle | Leased vehicle | Commercial vehicle | Other  
 {please describe}:



## VEHICLE DAMAGE SKETCH

<b>TIRE—WHEEL DAMAGE</b> a. Rotation physically restricted RF <u>1</u> LF <u>1</u> RR <u>2</u> LR <u>2</u> (1) Yes (2) No (8) NA (9) Unk.		b. Tire deflated RF <u>2</u> LF <u>2</u> RR <u>2</u> LR <u>2</u>		<b>ORIGINAL SPECIFICATIONS</b> Wheelbase <u>285</u> cm Overall Length <u>452</u> cm Maximum Width <u>183</u> cm Curb Weight <u>1,649</u> kg Average Track <u>155</u> cm Front Overhang <u>86</u> cm Rear Overhang <u>82</u> cm Undeformed End Width <u>154</u> cm Engine Size: cyl./displ. <u>16 3.0</u> L		<b>WHEEL STEER ANGLES</b> (For locked front wheels or displaced rear axles only) RF ± _____ ° LF ± _____ ° RR ± _____ ° LR ± _____ ° Within ± 5 degrees	
<b>TYPE OF TRANSMISSION</b> <input type="checkbox"/> Manual <input checked="" type="checkbox"/> Automatic				<b>DRIVE WHEELS</b> <input checked="" type="checkbox"/> FWD <input type="checkbox"/> RWD <input type="checkbox"/> 4WD		Approximate Cargo Weight _____ kg	

## MEASUREMENTS IN CENTIMETERS



**NOTES** Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.  
 Annotate any damage caused by extinction such as component removal by torching, prying, or hydraulic shears.

**AUTOMOBILE REFERENCE BOOK-PASSENGER CAR SECTION**

**PLYMOUTH Motor Corp., Division of Chrysler Corp.**

Type of Body Pass. Cap.	Model	Wheel Base	Dimensions Inches Lt. x Wt. x Ht.		Ship. Wt.	Tax H.P.	Factory List Price	Factory Del'd Price	
<b>Man. Trans. 5-speed; EPA Mileage Estimate 24/29</b>									
5-PS 3-dr HB Coupe w/23W	APPL24	97.2"	171.9"	67.3"	53.1"	2673	18.93	9,092	9,597
5-PS 5-dr HB Sedan w/23W	APPL44	97.2"	171.9"	67.3"	53.1"	2547	18.93	9,492	9,997
<b>Sundance Duster</b>									
5-PS 3-dr HB Coupe w/23G	APPS24	97.2"	171.9"	67.3"	53.1"	2673	18.93	10,252	10,757
5-PS 5-dr HB Sedan w/23G	APPS44	97.2"	171.9"	67.3"	53.1"	2547	18.93	10,652	11,157
<b>Auto. Trans. 3-speed; EPA Mileage Estimate 23/28</b>									
5-PS 3-dr HB Coupe w/24W	APPL24	97.2"	171.9"	67.3"	53.1"	2673	18.93	9,649	10,154
5-PS 5-dr HB Sedan w/24W	APPL44	97.2"	171.9"	67.3"	53.1"	2547	18.93	10,049	10,554
<b>Sundance Duster</b>									
5-PS 3-dr HB Coupe w/24G	APPS24	97.2"	171.9"	67.3"	53.1"	2673	18.93	10,809	11,314
5-PS 5-dr HB Sedan w/24G	APPS44	97.2"	171.9"	67.3"	53.1"	2547	18.93	11,209	11,714
<b>1994 Plymouth Sundance FWD V6 cyl 3.0 liter SHOC SMPI Gas Engine(EFA)(12 valve)</b>									
Bore & Stroke 3.586x2.992; Tax H.P. 30.86; SAE H.P. 141@5000; Torque 171@2400; 181 cu.in., 3.0 liter									
<b>Man. Trans. 5-speed; EPA Mileage Estimate 19/28</b>									
<b>Sundance Duster</b>									
5-PS 3-dr HB Coupe w/27G	APPS24	97.2"	171.9"	67.3"	53.1"	2723	18.93	11,046	11,551
5-PS 5-dr HB Sedan w/27G	APPS44	97.2"	171.9"	67.3"	53.1"	2754	18.93	11,446	11,951
<b>Auto. Trans. 4-speed; EPA Mileage Estimate 21/29</b>									
<b>Sundance Duster</b>									
5-PS 3-dr HB Coupe w/28G	APPS24	97.2"	171.9"	67.3"	53.1"	2703	18.93	11,776	12,281
5-PS 5-dr HB Sedan w/28G	APPS44	97.2"	171.9"	67.3"	53.1"	2734	18.93	12,176	12,681
Options Sundance: Destination Charges-\$505; L4 cyl 2.5 liter SOHC TBI Gas Engine(EDM) (Base)-\$286; V6 cyl 3.0 liter SHOC SMPI Gas Engine(EFA) (Duster)-\$794; Auto. Trans. 3-speed-\$557; Auto. Trans. 4-speed (Duster)-\$730; Air Conditioning-\$900; Anti-Lock Brakes-\$699; Console (Overhead)-\$265; Defroster Rear Window-\$173; Door Lock Power (2-dr)-\$199 (4-dr)-\$240; Emission (Calif & NY)-\$102; Paint (Extra Cost)-\$97; AM/FM Stereo Radio(Base)-\$284 w/cassette(Base)-\$504 (Duster)-\$220 w/Equalizer (Duster)-\$520 w/CD (Duster)-\$690; Speed Control-\$224; Tilt Steering Column-\$148; Sunroof-\$379; Power Windows (Duster) (2-dr)-\$265 (4-dr)-\$331; Wheels (14" AL) Base-\$376 (15" AL) Duster-\$328; Option Pkg Base (21W)-Std (22W)-\$557 (23W)-\$286 (24W)-\$843 (21Y)-\$1545 (22Y)-\$2102 (23Y)-\$1831 (24Y)-\$2388 Duster (23G)-Std (24G)-\$557 (27G)-\$794 (28G)-\$1524 (23H)-\$978 (24H)-\$1535 (27H)-\$1772 (28H)-\$2502									
<b>1994 Plymouth Voyager FWD L4 cyl 2.5 liter SOHC TBI Gas Engine(EDM)(8 valve)</b>									
Bore & Stroke 3.44x4.09; Tax H.P. 18.93; SAE H.P. 100@4800; Torque 135@2800; 153 cu.in., 2.5 liter									
<b>Man. Trans. 5-speed; EPA Mileage Estimate 20/27</b>									
5-PS 5-dr MiniVan w/21S	ASHL52	112.3"	178.1"	72.0"	64.2"	3203	18.93	14,919	15,479
<b>Auto. Trans. 3-speed</b>									
5-PS 5-dr MiniVan w/22T	ASHL52	112.3"	178.1"	72.0"	64.2"	3221	18.93	15,733	16,293
<b>1994 Plymouth Voyager FWD V6 cyl 3.0 liter SOHC SMPI Gas Engine(EFA)(12 valve)</b>									
Bore & Stroke 3.586x2.992; Tax H.P. 30.86; SAE H.P. 142@5000; Torque 173@2400; 181 cu.in., 3.0 liter									
<b>Auto. Trans. 3-speed; EPA Mileage Estimate 19/23</b>									
7-PS 5-dr MiniVan SE w/24A	ASHH52	112.3"	178.1"	72.0"	64.3"	3306	30.66	18,139	18,699
7-PS 5-dr MiniVan LE w/24J	ASHP52	112.3"	178.1"	72.0"	64.3"	3514	30.66	21,963	22,523
7-PS 5-dr MiniVan Grand w/24S	ASHL53	119.3"	192.8"	72.0"	64.8"	3472	30.66	18,178	18,738
<b>Auto. Trans. 4-speed</b>									
7-PS 5-dr MiniVan LE w/26K	ASHP52	112.3"	178.1"	72.0"	64.3"	3535	30.66	22,467	23,027
7-PS 5-dr MiniVan LX w/26M	ASHP52	112.3"	178.1"	72.0"	64.3"	3535	30.66	23,101	23,661
<b>1994 Plymouth Voyager V6 cyl 3.3 liter OHV SMPI Gas Engine(EGA)(12 valve)</b>									
Bore & Stroke 3.66x3.19; Tax H.P. 32.15; SAE H.P. 162@4800; Torque 194@3600; 201 cu.in., 3.3 liter									
<b>Auto. Trans. 4-speed; EPA Mileage Estimate (FWD) 18/23 (AWD) 15/20</b>									
<b>Voyager MiniVan</b>									
7-PS 5-dr MiniVan SE w/26B	ASHL52	112.3"	178.1"	72.0"	64.3"	3292	32.15	18,550	19,110
7-PS 5-dr MiniVan LX w/28M	ASHP52	112.3"	178.1"	72.0"	64.3"	3603	32.15	23,203	23,763
<b>Grand Voyager MiniVan FWD</b>									
7-PS 5-dr MiniVan SE w/28A	ASHH53	119.3"	192.8"	72.0"	64.8"	3580	32.15	19,304	19,864
7-PS 5-dr MiniVan LE w/28J	ASHP53	119.3"	192.8"	72.0"	64.8"	3684	32.15	22,883	23,443
<b>Grand Voyager MiniVan AWD</b>									
7-PS 5-dr MiniVan SE w/28A	ASPH53	119.3"	192.8"	72.0"	64.8"	3915	32.15	21,982	22,542
7-PS 5-dr MiniVan LE w/28J	ASPP53	119.3"	192.8"	72.0"	64.8"	4021	32.15	25,560	26,120
<b>1994 Plymouth Voyager V6 cyl 3.8 liter OHV SMPI Gas Engine(EGH)(12 valve)</b>									
Bore & Stroke 3.779x3.425; Tax H.P. 34.27; SAE H.P. 162@4400; Torque 213@3600; 230 cu.in., 3.8 liter									
<b>Auto. Trans. 4-speed; EPA Mileage Estimate (FWD) 16/22 (AWD) 15/20</b>									
<b>Grand Voyager MiniVan FWD</b>									
7-PS 5-dr MiniVan LE w/29K	ASHP53	119.3"	192.8"	72.0"	64.8"	3688	34.27	23,491	24,051
<b>Grand Voyager MiniVan AWD</b>									
7-PS 5-dr MiniVan LE w/29K	ASPP53	119.3"	192.8"	72.0"	64.8"	4025	34.27	26,168	26,728

## CODES FOR OBJECT CONTACTED

(99) Unknown event or object

[illegible]



**COLLISION DEFORMATION CLASSIFICATION****HIGHEST DELTA "V"**

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>01</u>	5. <u>02</u>	6. <u>12</u>	7. <u>F</u>	8. <u>D</u>	9. <u>E</u>	10. <u>W</u>	11. <u>01</u>

**Second Highest Delta "V"**

12. <u>04</u>	13. <u>50</u>	14. <u>12</u>	15. <u>F</u>	16. <u>R</u>	17. <u>L</u>	18. <u>N</u>	19. <u>01</u>
---------------	---------------	---------------	--------------	--------------	--------------	--------------	---------------

**CRUSH PROFILE IN CENTIMETERS**

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)

**HIGHEST DELTA "V"**

20. <u>L</u>	21. <u>C<sub>1</sub></u>	<u>C<sub>2</sub></u>	<u>C<sub>3</sub></u>	<u>C<sub>4</sub></u>	<u>C<sub>5</sub></u>	<u>C<sub>6</sub></u>	22. <u>± D</u>
<u>154</u>	<u>019</u>	<u>010</u>	<u>009</u>	<u>008</u>	<u>004</u>	<u>000</u>	<u>+ 000</u>

**Second Highest Delta "V"**

23. <u>L</u>	24. <u>C<sub>1</sub></u>	<u>C<sub>2</sub></u>	<u>C<sub>3</sub></u>	<u>C<sub>4</sub></u>	<u>C<sub>5</sub></u>	<u>C<sub>6</sub></u>	25. <u>± D</u>
<u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>

26. Undeformed End Width  
(Coded when highest severity impact is an end plane impact.) 154  
 \_\_\_\_\_ Code to the nearest centimeter  
 (250) 250 centimeters or more  
 (998) No highest severity end plane impact  
 (999) Unknown

27. Direct Damage Width  
(For highest severity impact) 153  
 \_\_\_\_\_ Code to the nearest centimeter  
 (250) 250 centimeters or more  
 (999) Unknown

28. Original Wheelbase 285  
 \_\_\_\_\_ Code to the nearest centimeter  
 (650) 650 centimeters or more  
 (999) Unknown  
112.3 inches X 2.54 = 285 centimeters

29. Original Average Track Width 155  
 \_\_\_\_\_ Code to the nearest centimeter  
 (185) 185 centimeters or more  
 (999) Unknown  
61 inches X 2.54 = 155 centimeters

30. Are CDCs Documented  
but Not Coded on The  
Automated File?

- (0) No  
(1) Yes

1

31. Researcher's Assessment of Vehicle  
Disposition

- (0) Not towed due to vehicle damage  
(1) Towed due to vehicle damage  
(9) Unknown

1

32. Is This A Multi-Stage Manufactured Vehicle  
And/Or A Certified Altered Vehicle?

- (0) No post manufacturer modifications  
(1) Yes - post manufacturer modifications  
(specify): \_\_\_\_\_

0

(Include photograph of CERTIFICATION  
PLACARD in case report)

- (9) Unknown if vehicle is modified

### FIRE OCCURRENCE

33. Fire Occurrence

- (0) No fire

Yes, fire occurred

- (1) Minor  
(2) Major  
(9) Unknown

0

34. Origin of Fire

- (0) No fire  
(1) Vehicle exterior (front, side, back, top)  
(2) Exhaust system  
(3) Fuel tank (and other fuel retention  
system parts)  
(4) Engine compartment  
(5) Cargo/trunk compartment  
(6) Instrument panel  
(7) Passenger compartment area  
(8) Other location (specify): \_\_\_\_\_

0

- (9) Unknown

### FUEL SYSTEM

35. Location of Fuel Tank-1 Filler Cap

4

36. Location of Fuel Tank-2 Filler Cap

0

- (0) No fuel tank  
(1) On back plane  
(2) Aft of center of the rear wheels (rear axle)  
on left side plane  
(3) Aft of center of the rear wheels (rear axle)  
on right side plane  
(4) Forward of center of the rear wheels (rear  
axle) on left side plane  
(5) Forward of center of the rear wheels (rear  
axle) on right side plane  
(6) Over the center of the rear wheels (rear  
axle) on left side plane  
(7) Over the center of the rear wheels (rear  
axle) on right side plane  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown

37. Type of Fuel Tank-1

1

38. Type of Fuel Tank-2

0

- (0) No fuel tank (electrical vehicle)  
(1) Metallic  
(2) Non-metallic  
(9) Unknown

39. Location of Fuel Tank-1

4

40. Location of Fuel Tank-2

0

- (0) No fuel tank  
(1) Aft of center of the rear wheels (rear axle)  
centered  
(2) Aft of center of the rear wheels (rear axle)  
left side  
(3) Aft of center of the rear wheels (rear axle)  
right side  
(4) Forward of center of the rear wheels (rear  
axle) centered  
(5) Forward of center of the rear wheels (rear  
axle) left side  
(6) Forward of center of the rear wheels (rear  
axle) right side  
(7) Over center of the rear wheels (rear axle)  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown

41. Damage to Fuel Tank-1

1

42. Damage to Fuel Tank-2

0

- (0) No fuel tank  
(1) No damage to fuel tank  
(2) Deformed, no seam failure  
(3) Deformed, with a seam failure  
(4) Punctured  
(5) Lacerated (ripped)  
(6) Abraded (scraped)  
(7) Filler neck separation from the fuel tank  
(8) Other damage (specify): \_\_\_\_\_  
(9) Unknown

[illegible]





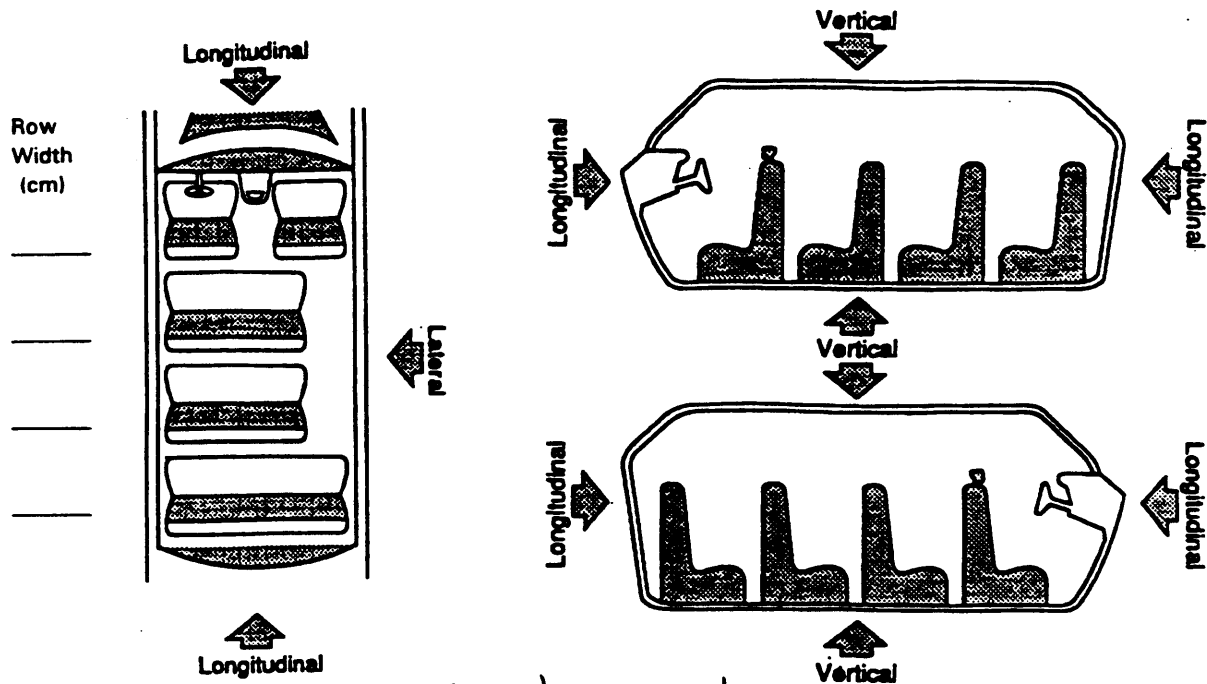
## INTERIOR VEHICLE FORM

GLAZING	
Type of Window/Windshield Glazing	
15. WS <u>1</u>	16. LF <u>4</u> 17. RF <u>4</u> 18. LR <u>4</u> 19. RR <u>4</u>
20. BL <u>4</u>	21. Roof <u>0</u> 22. Other <u>4</u>
(0) No glazing (1) AS-1 - Laminated (2) AS-2 - Tempered (3) AS-3 - Tempered-tinted (original) (4) AS-2 - Tempered-with after market tint (5) AS-3 - Tempered-tinted (with additional after market tint) (6) AS-14 - Glass/Plastic (7) Glazing removed prior to accident (8) Other (specify): (9) Unknown	
Window Precrash Glazing Status	
23. WS <u>1</u>	24. LF <u>2</u> 25. RF <u>2</u> 26. LR <u>2</u> 27. RR <u>2</u>
28. BL <u>1</u>	29. Roof <u>0</u> 30. Other <u>2</u>
(0) No glazing (1) Fixed (2) Closed (3) Partially opened (4) Fully opened (7) Glazing removed prior to accident (9) Unknown	
Glazing Damage from Impact Forces	
31. WS <u>1</u>	32. LF <u>1</u> 33. RF <u>1</u> 34. LR <u>1</u> 35. RR <u>1</u>
36. BL <u>1</u>	37. Roof <u>0</u> 38. Other <u>1</u>
(0) No glazing (1) No glazing damage from impact forces (2) Glazing in place and cracked from impact forces (3) Glazing in place and holed from impact forces (4) Glazing out-of-place (cracked or not) and not holed from impact forces (5) Glazing out-of-place and holed from impact forces (6) Glazing disintegrated from impact forces (7) Glazing removed prior to accident (9) Unknown if damaged	
Glazing Damage from Occupant Contact	
39. WS <u>3</u>	40. LF <u>1</u> 41. RF <u>1</u> 42. LR <u>1</u> 43. RR <u>1</u>
44. BL <u>1</u>	45. Roof <u>0</u> 46. Other <u>1</u>
(0) No glazing (1) No occupant contact to glazing (2) Glazing contacted by occupant but no glazing damage (3) Glazing in place and cracked by occupant contact (4) Glazing in place and holed by occupant contact (5) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact (6) Glazing out-of-place by occupant contact and holed by occupant contact (7) Glazing removed prior to accident (8) Glazing disintegrated by occupant contact (9) Unknown if contacted by occupant	

INTEGRITY	
1. Primary Sampling Unit Number <u>10</u>	
2. Case Number - Stratum <u>9612</u>	
3. Vehicle Number <u>01</u>	
4. Passenger Compartment Integrity <u>00</u>	
(00) No integrity loss	
Yes, Integrity Was Lost Through	
(01) Windshield	
(02) Door (side)	
(03) Door/hatch (back door)	
(04) Roof	
(05) Roof glass	
(06) Side window	
(07) Rear window (backlight)	
(08) Roof and roof glass	
(09) Windshield and door (side)	
(10) Windshield and roof	
(11) Side and rear window (side window and backlight)	
(12) Windshield and side window	
(13) Door and side window	
(98) Other combination of above (specify):	
(99) Unknown	
Door, Tailgate or Hatch Opening	
5. LF <u>1</u>	6. RF <u>1</u> 7. LR <u>0</u> 8. RR <u>1</u> 9. TG/H <u>1</u>
(0) No door/gate/hatch (1) Door/gate/hatch remained closed and operational (2) Door/gate/hatch came open during collision (3) Door/gate/hatch jammed shut (8) Other (specify):	
(9) Unknown	
Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09 ≠ 2, Then code 0	
10. LF <u>0</u>	11. RF <u>0</u> 12. LR <u>0</u> 13. RR <u>0</u> 14. TG/H <u>0</u>
(0) No door/gate/hatch or door not opened	
Door, Tailgate or Hatch Came Open During Collision	
(1) Door operational (no damage)	
(2) Latch/striker failure due to damage	
(3) Hinge failure due to damage	
(4) Door structure failure due to damage	
(5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage	
(6) Latch/striker and hinge failure due to damage	
(8) Other failure (specify):	
(9) Unknown	

# INTRUSION WORKSHEET

Note: Sketch intruded areas



LOCATION OF INTRUSION	INTRUDED COMPONENT	(All Measurements Are in Centimeters)			INTRUSION	DOMINANT CRUSH DIRECTION
		COMPARISON VALUE	INTRUDED VALUE	=		
		-		=		
		-		=		
		-		=		
		-		=		
		-		=		
		-		=		
		-		=		
		-		=		
		-		=		
		-		=		
		-		=		
		-		=		
		-		=		
		-		=		
		-		=		
		-		=		

Document no more than the 15 most severe intrusions

## OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47. _____	48. _____	49. _____	50. _____
2nd	51. _____	52. _____	53. _____	54. _____
3rd	55. _____	56. _____	57. _____	58. _____
4th	59. _____	60. _____	61. _____	62. _____
5th	63. _____	64. _____	65. _____	66. _____
6th	67. _____	68. _____	69. _____	70. _____
7th	71. _____	72. _____	73. _____	74. _____
8th	75. _____	76. _____	77. _____	78. _____
9th	79. _____	80. _____	81. _____	82. _____
10th	83. _____	84. _____	85. _____	86. _____

## LOCATION OF INTRUSION

Front Seat  
 (11) Left  
 (12) Middle  
 (13) Right

Second Seat  
 (21) Left  
 (22) Middle  
 (23) Right

Third Seat  
 (31) Left  
 (32) Middle  
 (33) Right

Fourth Seat  
 (41) Left  
 (42) Middle  
 (43) Right

(97) Catastrophic  
 (98) Other enclosed area (specify) \_\_\_\_\_

(99) Unknown

## INTRUDING COMPONENT

*Interior Components*

- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A (A1/A2)-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Side panel - forward of the A1/A2-pillar
- (11) Door panel (side)
- (12) Side panel - rear of the B-pillar
- (13) Roof (or convertible top)
- (14) Roof side rail
- (15) Windshield
- (16) Windshield header
- (17) Window frame
- (18) Floor pan (includes sill)
- (19) Backlight header
- (20) Front seat back
- (21) Second seat back
- (22) Third seat back
- (23) Fourth seat back
- (24) Fifth seat back
- (25) Seat cushion
- (26) Back door/panel (e.g., tailgate)
- (27) Other interior component (specify): \_\_\_\_\_

*Exterior Components*

- (30) Hood
- (31) Outside surface of this vehicle (specify): \_\_\_\_\_
- (32) Other exterior object in the environment (specify): \_\_\_\_\_
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify): \_\_\_\_\_
- (99) Unknown

## MAGNITUDE OF INTRUSION

- (1)  $\geq 3$  centimeters but  $< 8$  centimeters
- (2)  $\geq 8$  centimeters but  $< 15$  centimeters
- (3)  $\geq 15$  centimeters but  $< 30$  centimeters
- (4)  $\geq 30$  centimeters but  $< 46$  centimeters
- (5)  $\geq 46$  centimeters but  $< 61$  centimeters
- (6)  $\geq 61$  centimeters
- (7) Catastrophic
- (9) Unknown

## DOMINANT CRUSH DIRECTION

- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown



## STEERING RIM/SPOKE DEFORMATION

(All Measurements Are in Centimeters)

COMPARISON VALUE	-	DAMAGE VALUE	=	DEFORMATION
------------------	---	--------------	---	-------------

No - Deformation				
	-		=	
	-		=	
	-		=	

## STEERING COLUMN

## 87. Steering Column Type

- (1) Fixed column  
(2) Tilt column  
(3) Telescoping column  
(4) Tilt and telescoping column  
(8) Other column type (specify): \_\_\_\_\_

(9) Unknown

## 88. Tilt Steering Column Adjustment

- (0) No tilt steering column  
(1) Full up  
(2) Between full up and center  
(3) Center  
(4) Between center and full down  
(5) Full down  
(9) Unknown

## 89. Telescoping Steering Column Adjustment

- (0) No telescoping steering column  
(1) Full back  
(2) Between full back and midpoint  
(3) Midpoint  
(4) Between midpoint and full forward  
(5) Full forward  
(9) Unknown

## 90. Steering Rim/Spoke Deformation

- Code actual measured deformation to the nearest centimeter  
(00) No steering rim deformation  
(01-14) Actual measured value in centimeters  
(15) 15 centimeters or more  
(98) Observed deformation cannot be measured  
(99) Unknown

## 91. Location of Steering Rim/Spoke Deformation

- (00) No steering rim deformation

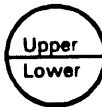
## Quarter Sections

- (01) Section A  
(02) Section B  
(03) Section C  
(04) Section D



## Half Sections

- (05) Upper half of rim/spoke  
(06) Lower half of rim/spoke  
(07) Left half of rim/spoke  
(08) Right half of rim/spoke



- (09) Complete steering wheel collapse  
(10) Undetermined location  
(99) Unknown

## INSTRUMENT PANEL

## 92. Odometer Reading

\_\_\_\_\_ kilometers  
Code to the nearest 1,000 kilometers  
(000) No odometer  
(001) Less than 1,500 kilometers  
(500) 499,500 kilometers or more  
(999) Unknown  
58,410 miles X 1.6093 = 94002 kilometers

Source: \_\_\_\_\_

## 93. Instrument Panel Damage from Occupant Contact?

- (0) No  
(1) Yes  
(9) Unknown

## 94. Type of Knee Bolster Covering

- (0) No knee bolster  
(1) Padded  
(2) Rigid plastic  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown

## 95. Knee Bolsters Deformed from Occupant Contact?

- (0) No knee bolster  
(1) No deformation  
(2) Yes - deformation  
(9) Unknown

## 96. Did Glove Compartment Door Open During Collision(s)?

- (0) No glove compartment door  
(1) No - door did not open  
(2) Yes - door opened  
(9) Unknown

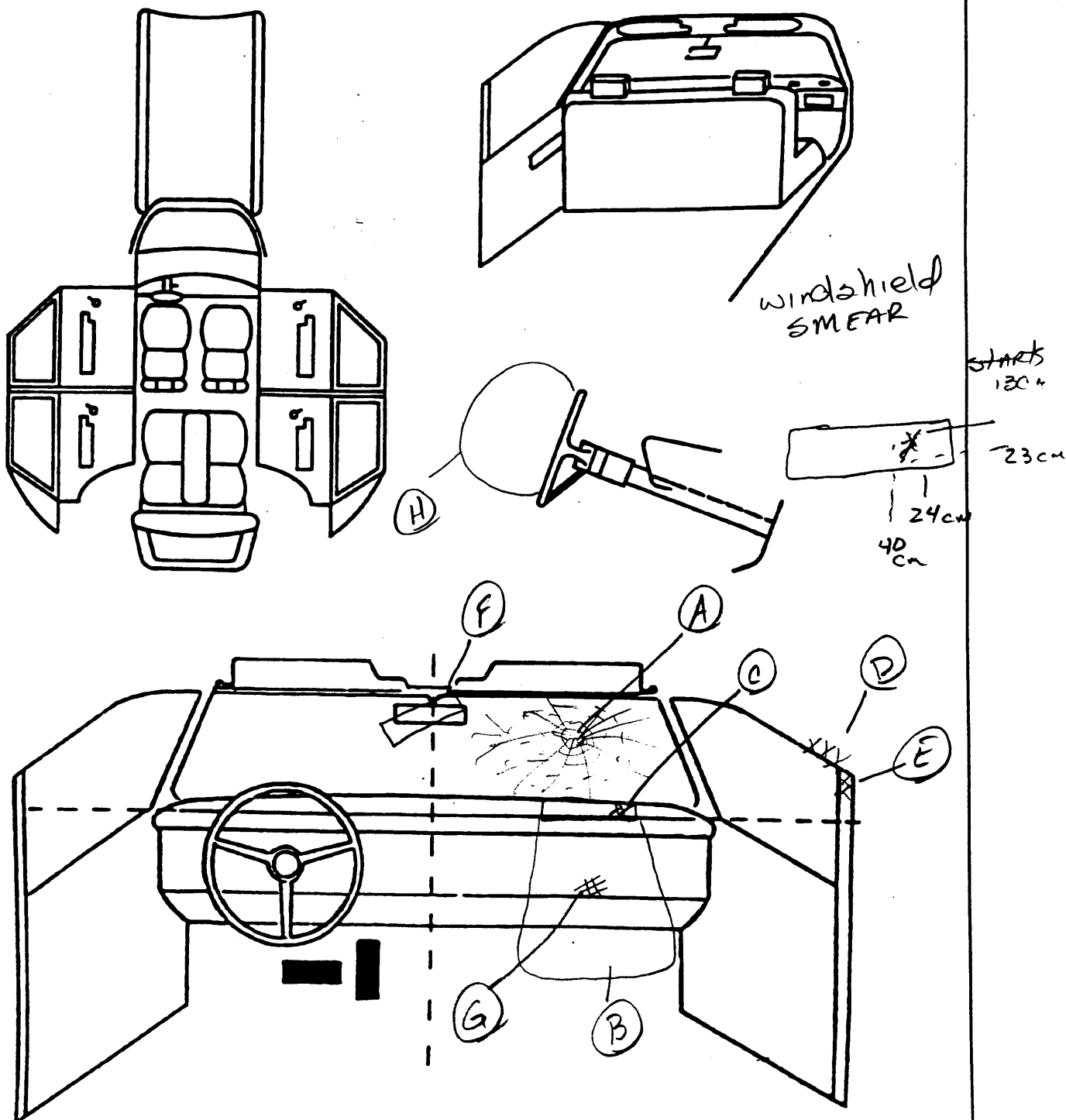
## 97. Adaptive (Assistive) Driving Equipment

- (0) No adaptive driving equipment  
(1) Adaptive driving equipment installed (Check all that apply.)  
[ ] Hand controls for braking/acceleration  
[ ] Steering control devices (attached to OEM steering wheel)  
[ ] Steering knob attached to steering wheel  
[ ] Low effort power steering (unit or device)  
[ ] Replacement steering wheel (i.e., reduced diameter)  
[ ] Joy-stick steering controls  
[ ] Wheelchair tie-downs  
[ ] Modification to seat belts (specify): \_\_\_\_\_  
[ ] Additional or relocated switches (specify): \_\_\_\_\_  
[ ] Raised roof  
[ ] Wall-mounted head rest (used behind wheelchair)  
[ ] Other adaptive device (specify): \_\_\_\_\_

(9) Unknown

## VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure.  
 Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.  
 Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.



## POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	001	02	HEAD/FACE	GREASY SMEAR	1
B	180	02	NECK/FACE	SKIN TRANSFERS	1
C	185	02	NECK/FACE	SKIN TRANSFER / Blood	1
D	204	02		GREASY SMEARS	2
E	104	02		MUCOUS DRIP	1-2
F	002			Tilted	3
G	613	02	LEG?	scuff	1
H	170	01	FACE	LIPSTICK TRANSFER	1
I					
J					
K					
L					
M					
N					

## FRONT

- (001) Windshield  
 (002) Mirror  
 (003) Sunvisor  
 (004) Steering wheel rim  
 (005) Steering wheel hub/spoke  
 (006) Steering wheel (combination of codes 004 and 005)  
 (007) Steering column, transmission selector lever, other attachment  
 (008) Cellular telephone or CB radio  
 (009) Add on equipment (e.g., tape deck, air conditioner)  
 (010) Left instrument panel and below  
 (011) Center instrument panel and below  
 (012) Right instrument panel and below  
 (013) Glove compartment door  
 (014) Knee bolster  
 (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)  
 (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)  
 (017) Windshield reinforced by exterior object, (specify):  
 (019) Other front object (specify):

## CODES FOR INTERIOR COMPONENTS

## LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests  
 (052) Left side hardware or armrest  
 (053) Left A (A1/A2)-pillar  
 (054) Left B-pillar  
 (055) Other left pillar (specify):  
 (056) Left side window glass  
 (057) Left side window frame  
 (058) Left side window sill  
 (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.  
 (060) Other left side object (specify):  
 RIGHT SIDE  
 (101) Right side interior surface, excluding hardware or armrests  
 (102) Right side hardware or armrest  
 (103) Right A (A1/A2)-pillar  
 (104) Right B-pillar  
 (105) Other right pillar (specify):  
 (106) Right side window glass  
 (107) Right side window frame  
 (108) Right side window sill  
 (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.  
 (110) Other right side object (specify):

## INTERIOR

- (151) Seat, back support  
 (152) Belt restraint webbing/buckle  
 (153) Belt restraint B-pillar or door frame attachment point  
 (154) Other restraint system component (specify):  
 (155) Head restraint system  
 (160) Other occupants (specify):  
 (161) Interior loose objects  
 (162) Child safety seat (specify):  
 (163) Other interior object (specify):  
 AIR BAG  
 (170) Air bag-driver side  
 (175) Air bag compartment cover-driver side  
 (180) Air bag-passenger side  
 (185) Air bag compartment cover-passenger side  
 (190) Other air bag (specify)  
 (195) Other air bag compartment cover (specify)

## ROOF

- (201) Front header  
 (202) Rear header  
 (203) Roof left side rail  
 (204) Roof right side rail  
 (205) Roof or convertible top

## FLOOR

- (251) Floor (including toe pan)  
 (252) Floor or console mounted transmission lever, including console  
 (253) Parking brake handle  
 (254) Foot controls including parking brake

## REAR

- (301) Backlight (rear window)  
 (302) Backlight storage rack, door, etc.  
 (303) Other rear object (specify):

## ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration  
 (402) Steering control devices (attached to OEM steering wheel)  
 (403) Steering knob attached to steering wheel  
 (405) Replacement steering wheel (i.e., reduced diameter)  
 (406) Joy stick steering controls  
 (407) Wheelchair tie-downs  
 (408) Modification to seat belts, (specify):  
 (409) Additional or relocated switches, (specify):  
 (410) Raised roof  
 (411) Wall mounted head rest (used behind wheel chair)  
 (412) Other adaptive device (specify):

## CONFIDENCE LEVEL OF CONTACT POINT

- (1) Certain  
 (2) Probable  
 (3) Possible  
 (9) Unknown

# MANUAL RESTRAINTS

**NOTES:** Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

If a Child safety seat is present, encode the data on the back of this page.

If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

		Left	Center	Right
FIRST	Availability	04	0	04
	Evidence of usage	04		04
	Used in this crash?	00		00
	Proper Use	0		0
	Failure Modes	0		0
	Anchorage Adjustment	4		4
SECOND	Availability	04		04
	Evidence of usage	04		04
	Used in this crash?	04		04
	Proper Use	4		4
	Failure Modes	1		1
	Anchorage Adjustment	1		1
OTHER	Availability	04	03	04
	Evidence of usage	00	00	00
	Used in this crash?	00	00	00
	Proper Use	0	0	0
	Failure Modes	0	0	0
	Anchorage Adjustment	1	1	1

## Manual (Active) Belt System Availability

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown

## Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify):
- (9) Unknown

## Manual (Active) Belt System Use

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify):

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used - type unknown
- (08) Other belt used (specify):

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat type unknown
- (18) Other belt used with child safety seat (specify):
- (99) Unknown if belt used

## Proper Use of Manual (Active) Belts

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

## Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):
- (8) Other improper use of manual belt system (specify):
- (9) Unknown

## Manual (Active) Belt Failure Modes During Accident

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):
- (6) Broken retractor
- (7) Combination of above (specify):
- (8) Other manual belt failure (specify):
- (9) Unknown

## Shoulder Belt Upper Anchorage Adjustment

- (0) No shoulder belt
- (1) No upper anchorage adjustment for shoulder belt

## Adjustable shoulder Belt Upper Anchorage

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

# AUTOMATIC RESTRAINTS

NOTES: Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

## AIR BAGS

		Left Front	Right Front	Other
F I R S T	Availability/Function	/	/	0
	Deployment	/	/	0
	Failure	/	/	0

### Air Bag System Availability/Function

- (0) Not equipped/not available  
(1) Air bag

#### Non-functional

- (2) Air bag disconnected (specify): \_\_\_\_\_

- (3) Air bag not reinstalled  
(9) Unknown

### Are There Indications of Air Bag System Failure? (This Occupant Position)

- (0) Not equipped/not available  
(1) No  
(2) Yes (specify): \_\_\_\_\_

- (9) Unknown

### Frontal Air Bag System Deployment (This Occupant Position)

- (0) Not equipped/not available  
(1) Deployed during accident (as a result of impact)  
(2) Deployed inadvertently just prior to accident  
(3) Deployed, accident sequence undetermined  
(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
(5) Unknown if deployed  
(7) Nondeployed  
(9) Unknown

### Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position)

- (0) Not equipped with an "other" air bag  
(1) Deployed during accident (as a result of impact)  
(2) Deployed inadvertently just prior to accident  
(3) Deployed, details unknown  
(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
(5) Unknown if deployed  
(7) Nondeployed  
(9) Unknown

## AUTOMATIC BELTS

		Left	Right
F I R S T	Availability/Function	0	0
	Use	0	0
	Type	0	0
	Proper Use	0	0
	Failure Modes	0	0

### Automatic (Passive) Belt System Availability/Function

- (0) Not equipped/not available  
(1) 2 point automatic belts  
(2) 3 point automatic belts  
(3) Automatic belts - type unknown

#### Non-functional

- (4) Automatic belts destroyed or rendered inoperative  
(9) Unknown

### Automatic (Passive) Belt System Use

- (0) Not equipped/not available/destroyed or rendered inoperative  
(1) Automatic belt in use  
(2) Automatic belt not in use (manually disconnected, motorized track inoperative)  
(3) Automatic belt use unknown  
(9) Unknown

### Automatic (Passive) Belt System Type

- (0) Not equipped/not available  
(1) Non-motorized system  
(2) Motorized system  
(9) Unknown

### Proper Use of Automatic (Passive) Belt System

- (0) Not equipped/not available/not used  
(1) Automatic belt used properly  
(2) Automatic belt used properly with child safety seat

#### Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm  
(4) Automatic shoulder belt worn behind back  
(5) Automatic belt worn around more than one person  
(6) Lap portion of automatic belt worn on abdomen  
(7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_  
(8) Other improper use of automatic belt system (specify): \_\_\_\_\_  
(9) Unknown

### Automatic (Passive) Belt Failure Modes During Accident

- (0) Not equipped/not available/not in use  
(1) No automatic belt failure(s)  
(2) Torn webbing (stretched webbing not included)  
(3) Broken buckle or latchplate  
(4) Upper anchorage separated  
(5) Other anchorage separated (specify): \_\_\_\_\_  
(6) Broken retractor  
(7) Combination of above (specify): \_\_\_\_\_  
(8) Other automatic belt failure (specify): \_\_\_\_\_  
(9) Unknown



## FIRST SEAT FRONTAL AIR BAGS

**NOTES:** Encode the applicable data for the driver and first seat passenger in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

	Driver	Passenger
Type of air bag?	1	1
Flaps open at tear points?	2	2
Flaps damaged?		
Air bag damaged?	01	01
Source of air bag damage	01	01
Air bag tethered?		2
Air bag have vent ports?	2	1
Other occupant contact air bag?	1	1
Occupant wearing eyewear?		

### Type of Air Bag

- (0) Not equipped/not available
- (1) Original manufacturer installed system
- (2) Retrofitted air bag
- (3) Replacement air bag
- (8) Unknown type of air bag
- (9) Unknown

### Did Air Bag Module Cover Flap(s) Open At Designated Tear Points?

- (0) Not equipped/not available
- (1) No
- (2) Yes
- (3) Deployed, unknown if flap(s) opened at designated tear points
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

### Were Air Bag Module Cover Flap(s) Damaged?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (3) Deployed, unknown if air bag module cover flap(s) damaged
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

### Was There Damage To The Air Bag?

- (00) Not equipped/not available
- (01) Not damaged

#### Yes - Air Bag Damage

- (02) Ruptured
- (03) Cut
- (04) Torn
- (05) Holed
- (06) Burned
- (07) Abraded
- (88) Other damage (specify):

### Source of Air Bag Damage

- (00) Not equipped/not available
- (01) Not damaged
- (02) Object worn by occupant, (specify):
- (03) Object carried by occupant, (specify):
- (04) Adaptive/assistive controls, (specify):
- (05) Fire in vehicle
- (06) Thermal burns
- (07) Rescue or emergency efforts
- (88) Other damage source (specify):
- (95) Damaged, unknown source
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

### Was The Air Bag Tethered?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of tether straps): 2 ea. 4" wide
- (3) Deployed, unknown if tethered
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

### Did The Air Bag Have Vent Ports?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of vent ports): 2
- (3) Deployed, unknown if vent ports present
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

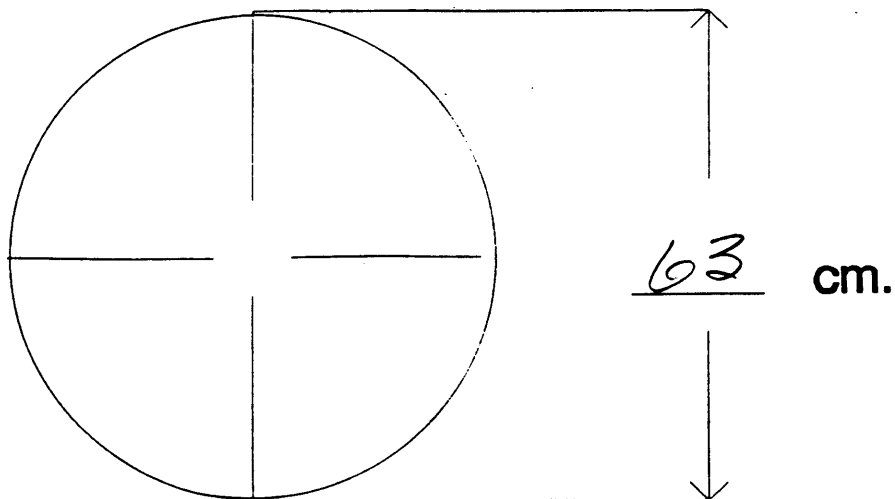
### Was the Air Bag in this Occupant's Position Contacted by Another Occupant?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (3) Deployed, unknown if other occupant contact to air bag
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

### Was This Occupant Wearing Eye-wear?

- (0) Not equipped/not available
- (1) No
- (2) Eyeglasses/sunglasses
- (3) Contact lenses
- (4) Deployed, unknown if eyewear worn
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

**1. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Front)**



### DRIVER AIR BAG SKETCHES (Cont'd)

#### 3. DRIVER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)

a. Upper Flap

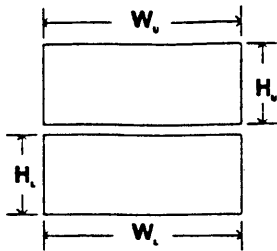
width ( $W_u$ ) 17

height ( $H_u$ ) 6

b. Lower Flap

width ( $W_l$ ) 18

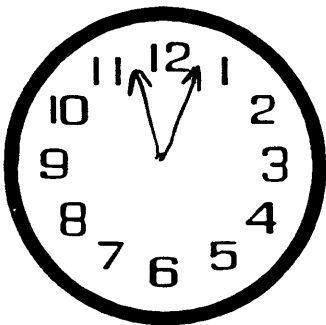
height ( $H_l$ ) 7



#### 4. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE

#### 5. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

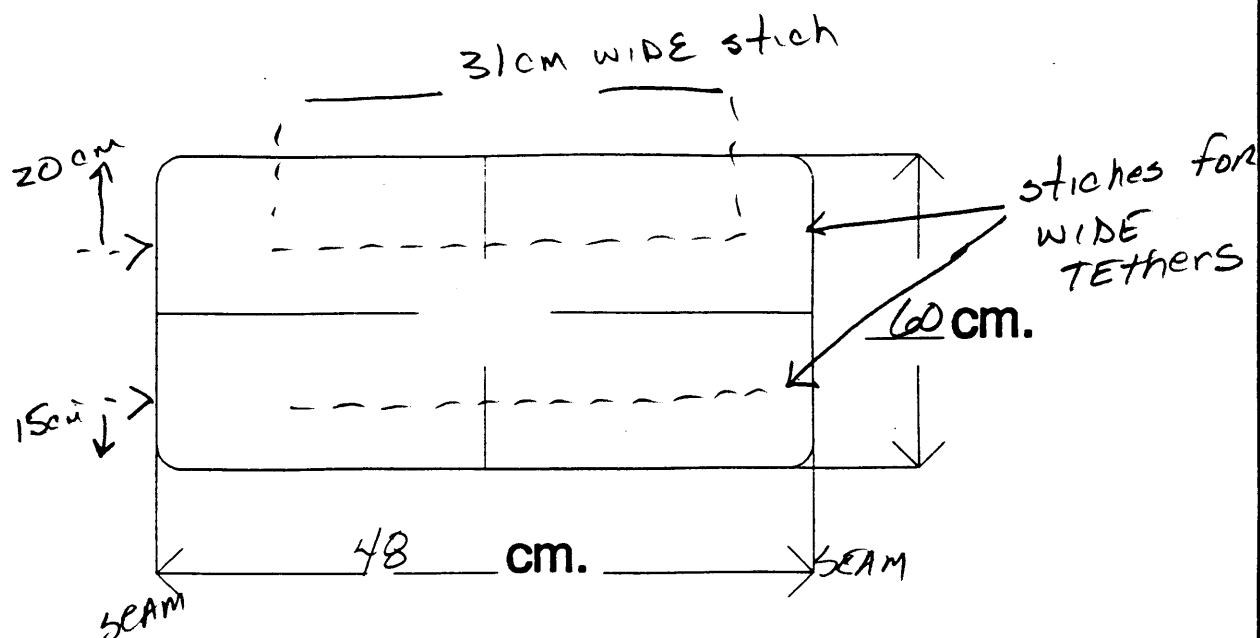
#### 6. SKETCH LOCATION OF CIRCULAR AIR BAG VENT PORTS



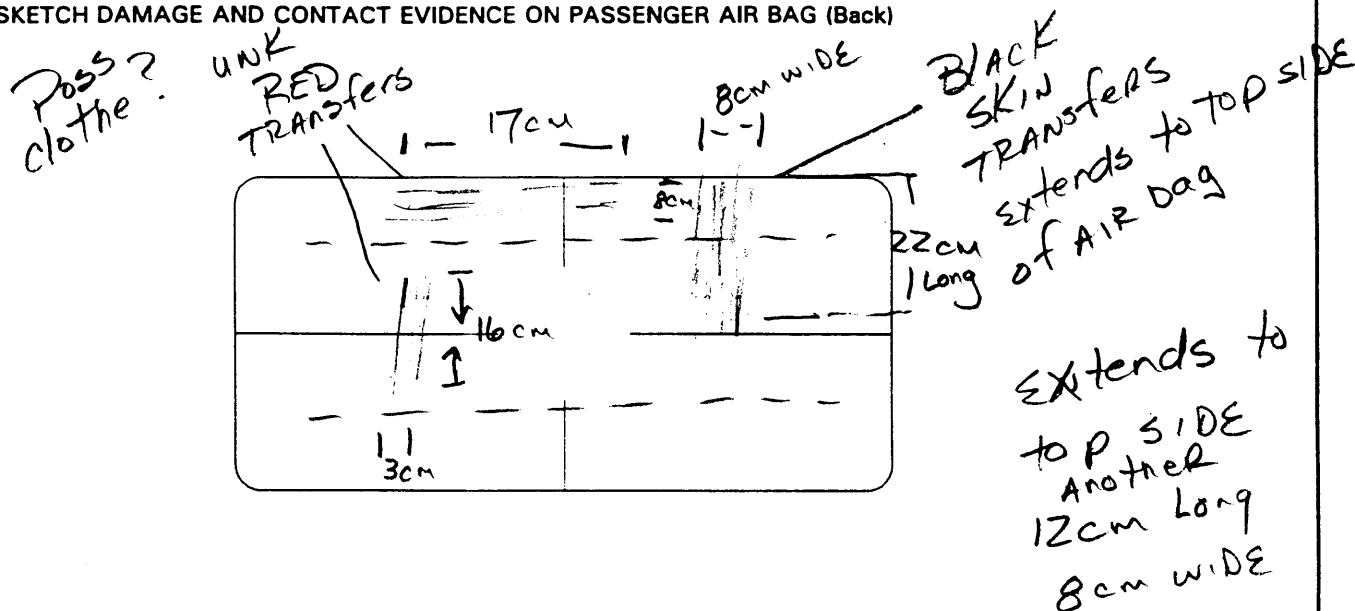
Both vent  
Diameters  
are 2.5 cm



**1. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Front)**



**2. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Back)**



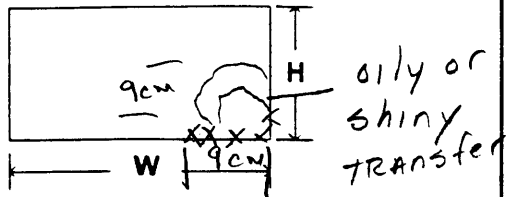
# PASSENGER AIR BAG SKETCHES (Cont'd)

## 3. PASSENGER AIR BAG MODULE COVER FLAP SIZE (SINGLE)

a. Flap

width (W) 32.5

height (H) 14.5



XX = SKIN transfers

## 4. PASSENGER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)

a. Upper Flap

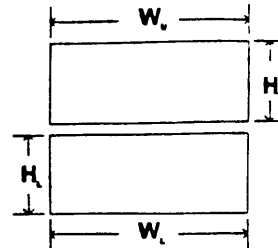
b. Lower Flap

width (W<sub>u</sub>) \_\_\_\_\_

width (W<sub>l</sub>) \_\_\_\_\_

height (H<sub>u</sub>) \_\_\_\_\_

height (H<sub>l</sub>) \_\_\_\_\_



## 5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE

## 6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

## 7. SKETCH LOCATION OF RECTANGULAR AIR BAG VENT PORTS

10	11	12	1	2
9				3
8	7	6	5	4

N/A

NO VENTS

**"OTHER" AIR BAG DAMAGE AND CONTACT SKETCHES**

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Front)

2. SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Back)



**"OTHER" AIR BAG SKETCHES (Cont'd)**

**3. SKETCH AIR BAG MODULE FLAP AND SIZE OR OPENING FOR AIRBAG**

**4. SKETCH AIR BAG VENT PORTS**

## HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
FIRST	Head Restraint Type/Damage	1		1
	Seat Type	02		02
	Seat Performance	1		1
	Seat Orientation	1		1
	Seat Track Position	6		6
	Seat Back Incline Pre/Post Impact	14		14
SECOND	Head Restraint Type/Damage	0	0	
	Seat Type	03	03	
	Seat Performance	1	1	
	Seat Orientation	1	1	
	Seat Track Position	1	1	
	Seat Back Incline Pre/Post Impact	14	14	
THIRD	Head Restraint Type/Damage	0	0	0
	Seat Type	05	05	05
	Seat Performance			
	Seat Orientation	1	1	1
	Seat Track Position	2	2	2
	Seat Back Incline Pre/Post Impact	14	14	14
OTHER	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
	Seat Track Position			
	Seat Back Incline Pre/Post Impact			

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE

(I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

Back seat folded down upon inspection

**HEAD RESTRAINTS/SEAT EVALUATION****Head Restraint Type/Damage by Occupant at This Occupant Position**

- (0) No head restraints
- (1) Integral — no damage
- (2) Integral — damaged during accident
- (3) Adjustable — no damage
- (4) Adjustable — damaged during accident
- (5) Add-on — no damage
- (6) Add-on — damaged during accident
- (8) Other  
Specify: \_\_\_\_\_
- (9) Unknown

**Seat Type (this Occupant Position)**

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): \_\_\_\_\_
- (10) Box mounted seat (i.e., van type)
- (99) Unknown

**Seat Performance (this Occupant Position)**

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed (specify): \_\_\_\_\_
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): \_\_\_\_\_
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

**Seat Orientation (this Occupant Position)**

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

**Seat Track Adjusted Position Prior To Impact**

- (0) Occupant not seated or no seat
- (1) Non-adjustable seat track

**Adjustable Seat Track**

- (2) Seat at forward most track position
- (3) Seat between forward most and middle track positions
- (4) Seat at middle track position
- (5) Seat between middle and rear most track positions
- (6) Seat at rear most track position
- (9) Unknown

**Seat Back Incline Prior and Post Impact**

- (00) Occupant not seated or no seat
- (01) Not adjustable

**Upright prior to impact**

- (11) Moved to completely rearward position
- (12) Moved to rearward midrange position
- (13) Moved to slightly rearward position
- (14) Retained pre-impact position
- (15) Moved to slightly forward position
- (16) Moved to forward midrange position
- (17) Moved to completely forward position

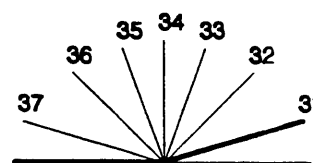
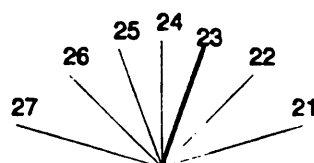
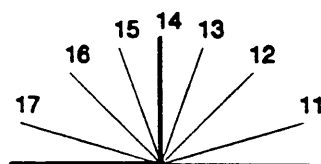
**Slightly reclined prior to impact**

- (21) Moved to completely rearward position
- (22) Moved to rearward midrange position
- (23) Retained pre-impact position
- (24) Moved to upright position
- (25) Moved to slightly forward position
- (26) Moved to forward midrange position
- (27) Moved to completely forward position

**Completely reclined prior to impact**

- (31) Retained pre-impact position
- (32) Moved to rearward midrange position
- (33) Moved to slightly rearward position
- (34) Moved to upright position
- (35) Moved to slightly forward position
- (36) Moved to forward midrange position
- (37) Moved to completely forward position

(99) Unknown

Coding diagrams for *Seat Back Incline Position Prior and Post Impact*

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE  
(I.E., UNUSUAL OCCUPANT CONTACT PATTERN)



## CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number						
1. Type of Child Safety Seat	No Seats available					
2. Child Safety Seat Orientation	@ time of inspection					
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model	Specify Below for Each Child Safety Seat					

**1. Type of Child Safety Seat**

- (0) No child safety seat
- (1) Infant seat
- (2) Toddler seat
- (3) Convertible seat
- (4) Booster seat
- (7) Other type child safety seat (specify):  
\_\_\_\_\_
- (8) Unknown child safety seat type
- (9) Unknown if child safety seat used

**2. Child Safety Seat Orientation**

- (00) No child safety seat
- Designed for Rear Facing for This Age/Weight
- (01) Rear facing
- (02) Forward facing
- (08) Other orientation (specify):  
\_\_\_\_\_
- (09) Unknown orientation
- Designed for Forward Facing for This Age/Weight
- (11) Rear facing
- (12) Forward facing
- (18) Other orientation (specify):  
\_\_\_\_\_
- (19) Unknown orientation
- Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight
- (21) Rear facing
- (22) Forward facing
- (28) Other orientation (specify):  
\_\_\_\_\_
- (29) Unknown orientation

(99) Unknown if child safety seat used

**3. Child Safety Seat Harness Usage**

**4. Child Safety Seat Shield Usage**

**5. Child Safety Seat Tether Usage**

Note: Options Below Are Used for Variables 3-5.

- (00) No child safety seat
- Not Designed with Harness/Shield/Tether
- (01) After market harness/shield/tether added, not used
- (02) After market harness/shield/tether used
- (03) Child safety seat used, but no after market harness/shield/tether added
- (09) Unknown if harness/shield/tether added or used
- Designed With Harness/Shield/Tether
- (11) Harness/shield/tether not used
- (12) Harness/shield/tether used
- (19) Unknown if harness/shield/tether used
- Unknown If Designed With Harness/Shield/Tether
- (21) Harness/shield/tether not used
- (22) Harness/shield/tether used
- (29) Unknown if harness/shield/tether used
- (99) Unknown if child safety seat used

**6. Child Safety Seat Make/Model**

(Specify make/model and occupant number)

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**EJECTION/ENTRAPMENT DATA**

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

**EJECTION** No ☒ Yes ☐

Describe indications of ejection and body parts involved in partial ejection(s):

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Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						

**Ejection**

- (1) Complete ejection  
(2) Partial ejection  
(3) Ejection, Unknown degree  
(9) Unknown

**Ejection Area**

- (1) Windshield  
(2) Left front  
(3) Right front  
(4) Left rear  
(5) Right rear  
(6) Rear

**(7) Roof**

- (8) Other area (e.g., back of pickup, etc.) (specify):

(9) Unknown

**Ejection Medium**

- (1) Door/hatch/tailgate  
(2) Nonfixed roof structure  
(3) Fixed glazing  
(4) Nonfixed glazing (specify):

**(5) Integral structure**

- (8) Other medium (specify):

(9) Unknown

**Medium Status (Immediately Prior to Impact)**

- (1) Open  
(2) Closed  
(3) Integral structure  
(9) Unknown

**ENTRAPMENT** No ☒ Yes ☐

Describe entrapment mechanism:

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Component(s):

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(Note in vehicle interior diagram)

**NASS CDS VEHICLE FORMS: VEHICLE #2**





## GENERAL VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

## VEHICLE IDENTIFICATION

4. Vehicle Model Year

Code the last two digits of the model year  
(99) Unknown

5. Vehicle Make (specify):

Applicable codes are found in your  
NASS Data Collection, Coding and  
Editing Manual.  
(99) Unknown

6. Vehicle Model (specify):

Applicable codes are found in your  
NASS Data Collection, Coding and  
Editing Manual.  
(999) Unknown

7. Body Type

Note: Applicable codes may be found on  
the back of this page.

8. Vehicle Identification Number

Left justify; Slash zeros and letter Z (0 and Z)  
No VIN—Code all zeros Unknown—Code all nines

9. Vehicle Special Use (This Trip)

(0) No special use

(1) Taxi

(2) Vehicle used as school bus

(3) Vehicle used as other bus

(4) Military

(5) Police

(6) Ambulance

(7) Fire truck or car

(8) Other (specify):

(9) Unknown

## OFFICIAL RECORDS

10. Police Reported Vehicle Disposition

(0) Not towed due to vehicle damage

(1) Towed due to vehicle damage

(9) Unknown

11. Police Reported Travel Speed

Code to the nearest kmph (NOTE: 000 means  
less than 0.5 kmph)

(160) 159.5 kmph and above

(999) Unknown

12. Speed Limit

(000) No statutory limit

Code posted or statutory speed limit  
in kmph

(999) Unknown

 $35 \text{ mph} \times 1.6093 = 56 \text{ kmph}$ 

13. Police Reported Alcohol Presence For Driver

(0) No alcohol present

(1) Yes alcohol present

(7) Not reported

(8) No driver present

(9) Unknown

14. Alcohol Test Result For Driver

Code actual value (decimal implied  
before first digit—0.xx)

(95) Test refused

(96) None given

(97) AC test performed, results unknown

(98) No driver present

(99) Unknown

Source:

15. Police Reported Other Drug Presence For  
Driver

(0) No other drug(s) present

(1) Yes other drug(s) present

(7) Not reported

(8) No driver present

(9) Unknown

16. Other Drug Specimen Test Result For Driver

(0) No specimen test given

(1) Drug(s) not found in specimen

(2) Drug(s) found in specimen, (specify):

(3) Specimen test given, results unknown or not  
obtained

(8) No driver present

(9) Unknown if specimen test given

17. Driver's Zip Code

(00001) Driver not a resident of U.S. or territories

Code actual 5-digit zip code

(99998) No driver present

(99999) Unknown

18. Driver's Race/Ethnic Origin

(1) White (non-Hispanic)

(2) Black (non-Hispanic)

(3) White (Hispanic)

(4) Black (Hispanic)

(5) American Indian, Eskimo or Aleut

(6) Asian or Pacific Islander

(7) Other (specify):

(8) No driver present

(9) Unknown

# CODES FOR BODY TYPE

## CDS APPLICABLE VEHICLES

### Automobiles

- (01) Convertible (excludes sun-roof, t-bar)
- (02) 2-door sedan, hardtop, coupe
- (03) 3-door/2-door hatchback
- (04) 4-door sedan, hardtop
- (05) 5-door/4-door hatchback
- (06) Station wagon (excluding van and truck based)
- (07) Hatchback, number of doors unknown
- (08) Other automobile type (specify): \_\_\_\_\_
- (09) Unknown automobile type

### Automobile Derivatives

- (10) Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup)
- (11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
- (12) Large limousine - more than four side doors or stretched chassis
- (13) Three-wheel automobile or automobile derivative

### Utility Vehicles ( $\leq 4,500$ kgs GVWR)

- (14) Compact utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [76 and before], Explorer, S-10 Blazer, Geo Tracker, Bravada, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Passport, Samurai, Sidekick, Rocky)
- (15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Hummer, Landcruiser, Rover, Scout, Yukon)
- (16) Utility station wagon (Chevy Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine)
- (19) Utility, unknown body type

### Van Based Light Trucks ( $\leq 4,500$ kgs GVWR)

- (20) Minivan (Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Vista, Aerostar, Windstar, Villager, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Quest, Mitsubishi Minivan, Expo Wagon, Vanagon/Camper.)
- (21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura.)
- (22) Step van or walk-in van ( $\leq 4,500$  kgs GVWR)
- (23) Van based motorhome ( $\leq 4,500$  kgs GVWR)
- (24) Van based school bus ( $\leq 4,500$  kgs GVWR)
- (25) Van based other bus ( $\leq 4,500$  kgs GVWR)
- (28) Other van type (Hi-Cube Van, Kary) (specify): \_\_\_\_\_
- (29) Unknown van type

### Light Conventional Trucks (Pickup style cab, $\leq 4,500$ kgs GVWR)

- (30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
- (31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500, T100)

- (32) Pickup with slide-in camper
- (33) Convertible pickup
- (39) Unknown pickup style light conventional truck type

### Other Light Trucks ( $\leq 4,500$ kgs GVWR)

- (40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
- (41) Truck based panel
- (42) Light truck based motorhome (chassis mounted)
- (45) Other light conventional truck type
- (48) Unknown light truck type
- (49) Unknown light vehicle type (automobile, utility, van, or light truck)

## OTHER VEHICLES

### Buses (Excludes Van Based)

- (50) School bus (designed to carry students, not cross country or transit)
- (58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify): \_\_\_\_\_
- (59) Unknown bus type

### Medium/Heavy Trucks ( $> 4,500$ kgs GVWR)

- (60) Step van ( $> 4,500$  kgs GVWR)
- (61) Single unit straight truck ( $4,500$  kgs  $<$  GVWR  $\leq 8,850$  kgs)
- (62) Single unit straight truck ( $8,850$  kgs  $<$  GVWR  $\leq 12,000$  kgs)
- (63) Single unit straight truck ( $> 12,000$  kgs GVWR)
- (64) Single unit straight truck, GVWR unknown
- (65) Medium/heavy truck based motorhome
- (67) Truck-tractor with no cargo trailer
- (68) Truck-tractor pulling one trailer
- (69) Truck-tractor pulling two or more trailers
- (70) Truck-tractor (unknown if pulling trailer)
- (78) Unknown medium/heavy truck type
- (79) Unknown truck type (light/medium/heavy)

### Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)

- (80) Motorcycle
- (81) Moped (motorized bicycle)
- (82) Three-wheel motorcycle or moped
- (88) Other motored cycle (minibike, motorscooter) (specify): \_\_\_\_\_
- (89) Unknown motored cycle type

### Other Vehicles

- (90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
- (91) Snowmobile
- (92) Farm equipment other than trucks
- (93) Construction equipment other than trucks
- (97) Other vehicle type
- (99) Unknown body type

**PRECRASH ENVIRONMENTAL DATA**

19. Relation To Interchange Or Junction 2  
 (0) Non-interchange area and non-junction  
 (1) Interchange area related

*Non-Interchange junctions*

- (2) Intersection related  
 (3) Driveway, alley access related  
 (4) Other junction (specify) \_\_\_\_\_

(5) Unknown type of junction \_\_\_\_\_

(9) Unknown

20. Trafficway Flow 0  
 (0) Not physically divided (two way traffic)  
 (1) Divided trafficway-median strip without positive barrier  
 (2) Divided trafficway-median strip with positive barrier  
 (3) One way traffic  
 (9) Unknown

21. Number Of Travel Lanes 2  
 (1) One  
 (2) Two  
 (3) Three  
 (4) Four  
 (5) Five  
 (6) Six  
 (7) Seven or more  
 (9) Unknown

22. Roadway Alignment 1  
 (1) Straight  
 (2) Curve right  
 (3) Curve left  
 (9) Unknown

23. Roadway Profile 1  
 (1) Level  
 (2) Uphill grade (> 2%)  
 (3) Hill crest  
 (4) Downhill grade (> 2%)  
 (5) Sag  
 (9) Unknown

24. Roadway Surface Type 2  
 (1) Concrete  
 (2) Bituminous (asphalt)  
 (3) Brick or block  
 (4) Slag, gravel, or stone  
 (5) Dirt  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

25. Roadway Surface Condition 1

- (1) Dry  
 (2) Wet  
 (3) Snow or slush  
 (4) Ice  
 (5) Sand, dirt, or oil  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

26. Light Conditions 1

- (1) Daylight  
 (2) Dark  
 (3) Dark, but lighted  
 (4) Dawn  
 (5) Dusk  
 (9) Unknown

27. Atmospheric Conditions 0

- (0) No adverse atmospheric-related driving conditions  
 (1) Rain  
 (2) Sleet/hail  
 (3) Snow  
 (4) Fog  
 (5) Rain and fog  
 (6) Sleet and fog  
 (7) Other (e.g., smog, smoke, blowing sand or dust, etc.) (specify): \_\_\_\_\_  
 (9) Unknown

28. Traffic Control Device 2

- (0) No traffic control(s)  
 (1) Traffic control signal (not RR crossing)

*Regulatory*

- (2) Stop sign  
 (3) Yield sign  
 (4) School zone sign  
 (5) Other regulatory sign (specify): \_\_\_\_\_

(6) Warning sign (not RR crossing) \_\_\_\_\_

(7) Unknown sign

(8) Miscellaneous/other controls including RR controls (specify): \_\_\_\_\_

(9) Unknown

29. Traffic Control Device Functioning 2

- (0) No traffic control device  
 (1) Traffic control device not functioning (specify): \_\_\_\_\_  
 (2) Traffic control device functioning properly  
 (9) Unknown



**PRECRASH DRIVER RELATED DATA**30. Driver's Distraction/Inattention To Driving 02

(Prior To Recognition Of Critical Event)

- (00) No driver present  
 (01) Attentive or not distracted  
 (02) Looked but did not see

*Distractions*

(03) By other occupant(s), (specify): \_\_\_\_\_

(04) By moving object in vehicle (specify): \_\_\_\_\_

(05) While talking or listening to cellular phone (specify location and type of phone): \_\_\_\_\_

(06) While dialing cellular phone (specify location and type of phone): \_\_\_\_\_

(07) While adjusting climate controls

(08) While adjusting radio, cassette, CD (specify): \_\_\_\_\_

(09) While using other device/object in vehicle (specify): \_\_\_\_\_

(10) Sleepy or fell asleep

(11) Distracted by outside person, object, or event (specify): \_\_\_\_\_

(12) Eating or drinking

(13) Smoking related

(97) Distracted/inattentive, details unknown

(98) Other, distraction (specify): \_\_\_\_\_

(99) Unknown

31. Pre-Event Movement (Prior to Recognition of Critical Event) 04

(00) No driver present

(01) Going straight

(02) Decelerating in traffic lane

(03) Accelerating in traffic lane

(04) Starting in traffic lane

(05) Stopped in traffic lane

(06) Passing or overtaking another vehicle

(07) Disabled or parked in travel lane

(08) Leaving a parking position

(09) Entering a parking position

(10) Turning right

(11) Turning left

(12) Making a U-turn

(13) Backing up (other than for parking position)

(14) Negotiating a curve

(15) Changing lanes

(16) Merging

(17) Successful avoidance maneuver to a previous critical event

(97) Other (specify): \_\_\_\_\_

(99) Unknown

32. Critical Precrash Event 17*This Vehicle Loss of Control Due To:*

(01) Blow out or flat tire

(02) Stalled engine

(03) Disabling vehicle failure (e.g., wheel fell off) (specify): \_\_\_\_\_

(04) Non-disabling vehicle problem (e.g., hood flew up) (specify): \_\_\_\_\_

(05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): \_\_\_\_\_

(06) Traveling too fast for conditions

(08) Other cause of control loss (specify): \_\_\_\_\_

(09) Unknown cause of control loss

*This Vehicle Traveling*

- (10) Over the lane line on left side of travel lane  
 (11) Over the lane line on right side of travel lane  
 (12) Off the edge of the road on the left side  
 (13) Off the edge of the road on the right side  
 (14) End departure  
 (15) Turning left at intersection  
 (16) Turning right at intersection  
 (17) Crossing over (passing through) intersection  
 (18) This vehicle decelerating  
 (19) Unknown travel direction

*Other Motor Vehicle In Lane*

- (50) Other vehicle stopped  
 (51) Traveling in same direction with lower steady speed  
 (52) Traveling in same direction while decelerating  
 (53) Traveling in same direction with higher speed  
 (54) Traveling in opposite direction  
 (55) In crossover  
 (56) Backing  
 (59) Unknown travel direction of other motor vehicle in lane

*Other Motor Vehicle Encroaching Into Lane*

- (60) From adjacent lane (same direction)—over left lane line  
 (61) From adjacent lane (same direction)—over right lane line  
 (62) From opposite direction—over left lane line  
 (63) From opposite direction—over right lane line  
 (64) From parking lane  
 (65) From crossing street, turning into same direction  
 (66) From crossing street, across path  
 (67) From crossing street, turning into opposite direction  
 (68) From crossing street, intended path not known  
 (70) From driveway, turning into same direction  
 (71) From driveway, across path  
 (72) From driveway, turning into opposite direction  
 (73) From driveway, intended path not known  
 (74) From entrance to limited access highway  
 (78) Encroachment by other vehicle—details unknown

*Pedestrian, Pedalcyclist, or Other Nonmotorist*

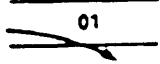



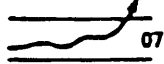



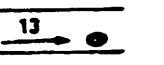
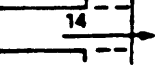
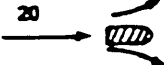
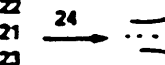
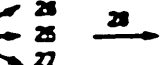
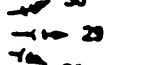
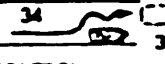
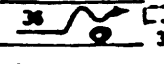

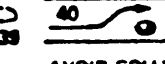
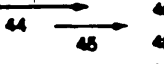
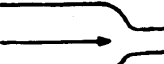
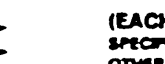

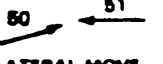
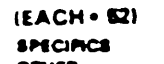







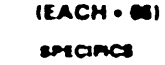

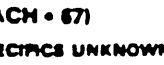
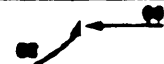
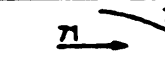
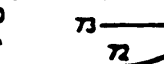

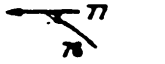


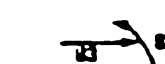
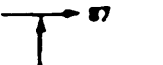


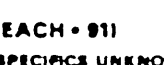
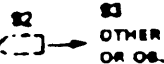

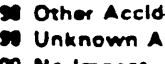
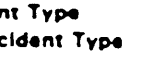

- (80) Pedestrian in roadway  
 (81) Pedestrian approaching roadway  
 (82) Pedestrian—unknown location  
 (83) Pedalcyclist or other nonmotorist in roadway (specify): \_\_\_\_\_  
 (84) Pedalcyclist or other nonmotorist approaching roadway, (specify): \_\_\_\_\_  
 (85) Pedalcyclist or other nonmotorist—unknown location (specify): \_\_\_\_\_

*Object or Animal*

- (87) Animal in roadway  
 (88) Animal approaching roadway  
 (89) Animal—unknown location  
 (90) Object in roadway  
 (91) Object approaching roadway  
 (92) Object—unknown location  
 (98) Other critical precrash event (specify): \_\_\_\_\_  
 (99) Unknown

<p>33. Attempted Avoidance Maneuver <u>01</u></p> <p>(00) No driver present (01) No avoidance maneuver (02) Braking (no lockup) (03) Braking (lockup) (04) Braking (lockup unknown) (05) Releasing brakes (06) Steering left (07) Steering right (08) Braking and steering left (09) Braking and steering right (10) Accelerating (11) Accelerating and steering left (12) Accelerating and steering right (98) Other action (specify): _____ (99) Unknown</p> <p>34. Pre-Impact Stability <u>1</u></p> <p>(0) No driver present (1) Tracking (2) Skidding longitudinally—rotation less than 30 degrees (3) Skidding laterally—clockwise rotation (4) Skidding laterally—counterclockwise rotation (7) Other vehicle loss-of-control (specify): _____ (9) Precrash stability unknown</p>	<p>35. Pre-Impact Location <u>1</u></p> <p>(0) No driver present (1) Stayed in original travel lane (2) Stayed on roadway but left original travel lane (3) Stayed on roadway, not known if left original travel lane (4) Departed roadway (5) Remained off roadway (6) Returned to roadway (7) Entered roadway (9) Unknown</p> <p>36. Accident Type <u>87</u> (Note: Applicable codes on back of this page) (00) No impact Code the number of the diagram that best describes the accident circumstance (98) Other accident type (specify): _____ (99) Unknown</p>
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**STOP HERE IF GV07 DOES NOT EQUAL 01 - 49**

Category	Configuration	ACCIDENT TYPES (Includes Intent)				
I Single Driver	A Right Roadside Departure	 01 DRIVE OFF ROAD	 02 CONTROL/ TRACTION LOSS	 03 AVOID COLLISION WITH VEH., PED., ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN
	B Left Roadside Departure	 06 DRIVE OFF ROAD	 07 CONTROL/ TRACTION LOSS	 08 AVOID COLLISION WITH VEH., PED., ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN
	C Forward Impact	 11 PARKED VEH.	 12 STA. OBJECT	 13 PEDESTRIAN/ ANIMAL	 14 END DEPARTURE	15 SPECIFICS OTHER 16 SPECIFICS UNKNOWN
II Same Trafficway Same Direction	D Rear-End	 20 STOPPED 21, 22, 23	 22 SLOWER 24, 25, 26, 27	 24 DECEL. 28, 29, 30, 31	 28 AVOID COLLISION WITH VEH.	(EACH - 32) SPECIFICS OTHER (EACH - 33) SPECIFICS UNKNOWN
	E Forward Impact	 34 CONTROL/ TRACTION LOSS	 36 CONTROL/ TRACTION LOSS	 38 AVOID COLLISION WITH VEH.	 40 AVOID COLLISION WITH OBJECT	(EACH - 42) SPECIFICS OTHER (EACH - 43) SPECIFICS UNKNOWN
	F Sideswipe Angle	 44 SPEW	 46 SPEW	 48 SPEW	 49 SPEW	(EACH - 48) SPECIFICS OTHER (EACH - 49) SPECIFICS UNKNOWN
III Same Trafficway Opposite Direction	G Head-On	 50 LATERAL MOVE	 51 SPEW	 52 SPEW	 53 SPEW	(EACH - 52) SPECIFICS OTHER (EACH - 53) SPECIFICS UNKNOWN
	H Forward Impact	 54 CONTROL/ TRACTION LOSS	 56 CONTROL/ TRACTION LOSS	 58 AVOID COLLISION WITH VEH.	 60 AVOID COLLISION WITH OBJECT	(EACH - 62) SPECIFICS OTHER (EACH - 63) SPECIFICS UNKNOWN
	I Sideswipe Angle	 64 LATERAL MOVE	 66 SPEW	 68 SPEW	 70 SPEW	(EACH - 66) SPECIFICS OTHER (EACH - 67) SPECIFICS UNKNOWN
IV Change Trafficway Vehicle Turning	J Turn Across Path	 68 INITIAL OPPOSITE DIRECTIONS	 70 INITIAL SAME DIRECTIONS	 72 INITIAL SAME DIRECTIONS	 74 INITIAL SAME DIRECTIONS	(EACH - 74) SPECIFICS OTHER (EACH - 75) SPECIFICS UNKNOWN
	K Turn Into Path	 76 TURN INTO SAME DIRECTION	 78 TURN INTO SAME DIRECTION	 80 TURN INTO OPPOSITE DIRECTIONS	 82 TURN INTO OPPOSITE DIRECTIONS	(EACH - 84) SPECIFICS OTHER (EACH - 85) SPECIFICS UNKNOWN
V Intersecting Paths (Vehicle Damage)	L Straight Paths	 86 SPECIFICS OTHER	 88 SPECIFICS OTHER	 90 SPECIFICS OTHER	 91 SPECIFICS OTHER	(EACH - 90) SPECIFICS OTHER (EACH - 91) SPECIFICS UNKNOWN
VI Miscellaneous	M Backing Etc.	 82 BACKING VEH.	 83 OTHER VEH. OR OBJECT	 98 Other Accident Type	 99 Unknown Accident Type	 00 No Impact



**OCCUPANT RELATED**

37. Driver Presence in Vehicle 1  
 (0) Driver not present  
 (1) Driver present  
 (9) Unknown
38. Number of Occupants This Vehicle 01  
 (00-96) Code actual number of occupants for this vehicle  
 (97) 97 or more  
 (99) Unknown
39. Number of Occupant Forms Submitted 01

**AIR BAG RELATED**

40. Is this an AOPS Vehicle? 0  
 (0) No (includes unknown)  
 (1) Yes - researcher determined  
 (2) VIN determined air bag system  
 (3) VIN determined automatic (passive) belts  
 (4) VIN determined air bag and automatic (passive) belts
41. Air Bag(s) Deployment, First Seat Frontal 0  
 (0) Not equipped or not available  
 (1) No air bags deployed  
*Single Air Bag Vehicle*  
 (2) Driver air bag deployed  
 (3) Driver air bag, unknown if deployed  
*Multiple Air Bag Vehicle*  
 (4) Driver side only deployed  
 (5) Passenger side only deployed  
 (6) Driver and passenger side deployed  
 (7) Driver and passenger side unknown if deployed  
 (8) Air bag(s) deployed, details unknown  
 (9) Unknown
42. Air Bag(s) Deployment, Other Than First Seat Frontal 0  
 (0) Not equipped with an "other" air bag  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

Specify type of "other" air bag present: \_\_\_\_\_

**VEHICLE WEIGHT ITEMS**

43. Vehicle Curb Weight 1230  
 Code weight to nearest 10 kilograms.  
 (045) Less than 450 kilograms  
 (610) 6,100 kilograms or more  
 (999) Unknown  
2715 lbs X .4536 = 1232 kgs  
 Source: \_\_\_\_\_

44. Vehicle Cargo Weight 0600  
 Code weight to nearest 10 kilograms.  
 (000) Less than 5 kilograms  
 (450) 4,500 kilograms or more  
 (999) Unknown  
 \_\_\_\_\_ lbs X .4536 = \_\_\_\_\_ kgs  
 Source: DRIVER

**ROLLOVER DATA**

45. Rollover 00  
 (00) No rollover (no overturning)  
*Rollover (primarily about the longitudinal axis)*  
 (01-16) Code the number of quarter turns  
 (17) Rollover, 17 or more quarter turns (specify): \_\_\_\_\_  
 (98) Rollover--end-over-end (i.e., primarily about the lateral axis)  
 (99) Rollover (overturn), details unknown
46. Rollover Initiation Type 00  
 (00) No rollover  
 (01) Trip-over  
 (02) Flip-over  
 (03) Turn-over  
 (04) Climb-over  
 (05) Fall-over  
 (06) Bounce-over  
 (07) Collision with another vehicle  
 (08) Other rollover initiation type specify): \_\_\_\_\_  
 (98) Rollover--end-over-end  
 (99) Unknown rollover initiation type
47. Location of Rollover Initiation 0  
 (0) No rollover  
 (1) On roadway  
 (2) On shoulder--paved  
 (3) On shoulder--unpaved  
 (4) On roadside or divided trafficway median  
 (8) Rollover--end-over-end  
 (9) Unknown
48. Rollover Initiation Object Contacted 00  
 (Note: Applicable codes on back of page)
49. Location on Vehicle Where Initial Principal Tripping Force Is Applied 0  
 (0) No rollover  
 (1) Wheels/tires  
 (2) Side plane  
 (3) End plane  
 (4) Undercarriage  
 (5) Other location on vehicle (specify): \_\_\_\_\_  
 (6) Non-contact rollover forces (specify): \_\_\_\_\_  
 (8) Rollover--end-over-end  
 (9) Unknown
50. Direction of Initial Roll 0  
 (0) No rollover  
 (1) Roll right - primarily about the longitudinal axis  
 (2) Roll left - primarily about the longitudinal axis  
 (8) Rollover--end-over-end  
 (9) Unknown roll direction

**OVERRIDE/UNDERRIDE (THIS VEHICLE)**

51. Front Override/Underride (this Vehicle) 0
52. Rear Override/Underride (this Vehicle) 0
- (0) No override/underride, or not an end-to-end impact between two CDS applicable vehicles, and no medium/heavy truck or bus underride
- Override (see specific CDC)*  
*[Between 2 CDS applicable vehicles (Bodytype, GV07 = 1-49)]*
- (1) 1st CDC  
 (2) 2nd CDC  
 (3) Other not automated CDC (specify):  
 \_\_\_\_\_
- Underride (see specific CDC)*  
*[Between 2 CDS applicable vehicles (Bodytype, GV07 = 1-49)]*
- (4) 1st CDC  
 (5) 2nd CDC  
 (6) Other not automated CDC (specify):  
 \_\_\_\_\_
- (7) Medium/heavy truck or bus override (of any configuration)  
 (9) Unknown

**HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V**

Values: (000)-(359) Code actual value

- (997) Noncollision  
 (998) Impact with object  
 (999) Unknown

53. Heading Angle For This Vehicle 270
54. Heading Angle For Other Vehicle 186

**RECONSTRUCTION DATA**

55. Towed Trailing Unit 0
- (0) No towed unit  
 (1) Yes—towed trailing unit  
 (9) Unknown
56. Documentation of Trajectory Data for This Vehicle 0
- (0) No  
 (1) Yes
57. Post Collision Condition of Tree or Pole (For Highest Delta V) 0
- (0) Not collision (for highest delta V) with tree or pole  
 (1) Not damaged  
 (2) Cracked/sheared  
 (3) Tilted < 45 degrees  
 (4) Tilted ≥ 45 degrees  
 (5) Uprooted tree  
 (6) Separated pole from base  
 (7) Pole replaced  
 (8) Other (specify):  
 \_\_\_\_\_
- (9) Unknown

**ACCIDENT RECONSTRUCTION PROGRAMS HIGHEST DELTA V**

58. Basis for Total (Resultant) Delta V (highest) 01

(00) No vehicle inspection

*Delta V Calculated*

- (01) Reconstruction program  
 -damage only routine  
 (02) Reconstruction program  
 -damage and trajectory routine  
 (03) Missing vehicle algorithm

*Delta V Not Calculated*

- (04) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.

*All vehicles within scope (CDC applicable) of reconstruction program but one of the collision conditions is beyond the scope of the reconstruction program or other acceptable reconstruction technique, regardless of adequacy of damage data.*

- (05) Rollover  
 (06) Other non-horizontal forces  
 (07) Sideswipe type damage  
 (08) Severe override  
 (09) Yielding object  
 (10) Overlapping damage  
 (11) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available, (specify):  
 \_\_\_\_\_

- (98) Other, (specify):  
 \_\_\_\_\_

## COMPUTER GENERATED CRASH SEVERITY

59. Total Delta V

01717.2 Nearest kmph (highest)

\_\_\_\_\_ Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)  
 (160) 159.5 kmph and above  
 (999) Unknown

60. Longitudinal Component of Delta V

⊖ 006

Highest

-5.9 Nearest kmph (highest)

\_\_\_\_\_ Nearest kmph (secondary)

(NOTE: \_\_\_000 means greater than  
 -0.5 kmph and less than +0.5 kmph)  
 (±160) ±159.5 kmph and above  
 (\_999) Unknown

61. Lateral Component of Delta V

⊖ 016

Highest

-16.1 Nearest kmph (highest)

\_\_\_\_\_ Nearest kmph (secondary)

(NOTE: \_\_\_000 means greater than -0.5 kmph  
 and less than +0.5 kmph)  
 (±160) ±159.5 kmph and above  
 (\_999) Unknown

62. Energy Absorption

010.9 0010,914 Nearest 100 joules (highest)

\_\_\_\_\_ Nearest 100 joules (secondary)

(NOTE: 0000 means less than 50 joules)  
 (9997) 999,650 joules or more  
 (9999) Unknown

63. Impact Speed

Highest

998

\_\_\_\_\_ Nearest kmph (highest)

\_\_\_\_\_ Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)  
 (160) 159.5 kmph and above  
 (998) Trajectory algorithm not run  
 (999) Unknown

## DELTA V CONFIDENCE LEVEL

64. Confidence In Reconstruction Program Results (For Highest Delta V)

1

- (0) No reconstruction  
 (1) Collision fits model — results appear reasonable  
 (2) Collision fits model — results appear high  
 (3) Collision fits model — results appear low  
 (4) Borderline reconstruction — results appear reasonable

## OTHER SPEED ESTIMATE

65. Barrier Equivalent Speed

Highest

01212.3 Nearest kmph (highest)

\_\_\_\_\_ Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)  
 (160) 159.5 kmph and above  
 (999) Unknown

IS MISSING VEHICLE ALGORITHM APPLICABLE FOR THIS VEHICLE? [ ] YES ☒ NO

IF YES: IS A COMPLETED PROGRAM SUMMARY INCLUDED? [ ] YES [ ] NO



ESTIMATED DELTA V	VEHICLE INSPECTION
<p>66. Estimated Highest Delta V (Researcher Determined) <u>0</u></p> <p>(0) Reconstruction Delta V coded</p> <p><i>Estimated Delta V</i></p> <p>(1) Less than 10 kmph (2) <math>\geq 10</math> kmph but <math>&lt; 25</math> kmph (3) <math>\geq 25</math> kmph but <math>&lt; 40</math> kmph (4) <math>\geq 40</math> kmph but <math>&lt; 55</math> kmph (5) <math>\geq 55</math> kmph</p> <p><i>Other estimates of damage severity</i></p> <p>(6) Minor (7) Moderate (8) Severe</p> <p>(9) Unknown</p>	<p>67. Type of Vehicle Inspection <u>3</u></p> <p>(0) No inspection (1) Vehicle fully repaired-no damage evident (2) Partial inspection (specify): _____ (3) Complete inspection</p>

\*\*\* IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV67 = 0), \*\*\*

DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS

\*\*\* IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE \*\*\*

THE EXTERIOR VEHICLE, INTERIOR VEHICLE,  
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.

## EXTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

Administration		CRASHWORTHINESS DATA SYSTEM	
1. Primary Sampling Unit Number	<u>1</u> <u>0</u>	3. Vehicle Number	<u>0</u> <u>2</u>
2. Case Number - Stratum	<u>9</u> <u>6</u> <u>1</u> <u>2</u>		

## VEHICLE IDENTIFICATION

VIN 1G1AW19R3G6 Model Year 86  
Vehicle Make (specify): Chevrolet Vehicle Model (specify): Celebrity

## LOCATOR

Locate the end of the damage with respect to the vehicle's damaged center point or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L	Location of Max Crush
01	starts 185.5 Forward RRX	starts 157.5 forward RRX	C-3
02	starts 7cm to R of Center (PASS)	ACROSS front Bumper	Between C-3, C4

### CRUSH PROFILE IN CENTIMETERS

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

Use as many lines/columns as necessary to describe each damage profile.

[illegible]

# ORIGINAL SPECIFICATIONS WORK SHEET

Wheelbase 104.9 inches x 2.54 = 266.4 cm  
 Overall Length 188.3 inches x 2.54 = 478.3 cm  
 Maximum Width 69.3 inches x 2.54 = 176.0 cm  
 Curb Weight 2,715 pounds x 0.4536 = 1,231.5 kg  
 Average Track  $\left. \begin{matrix} 58.7 \\ 57.0 \end{matrix} \right\}$  57.85 inches x 2.54 = 146.9 cm  
 Front Overhang 40.6 inches x 2.54 = 103.1 cm  
 Rear Overhang 42.5 inches x 2.54 = 108.0 cm  
 Undeformed End Width 63. inches x 2.54 = 160.0 cm  
 Engine Size: cyl/disl. 4 2.5L cc x 0.001 = 2.5 L  
 6-Passenger, 4-door 151 CID x 0.0164 = 2.5 L

Shipping Weight 2,638  
100

2,738

Curb Weight 2,668

Curb Weight 2,715

## SPECIAL CRASH INVESTIGATION ADDENDUM

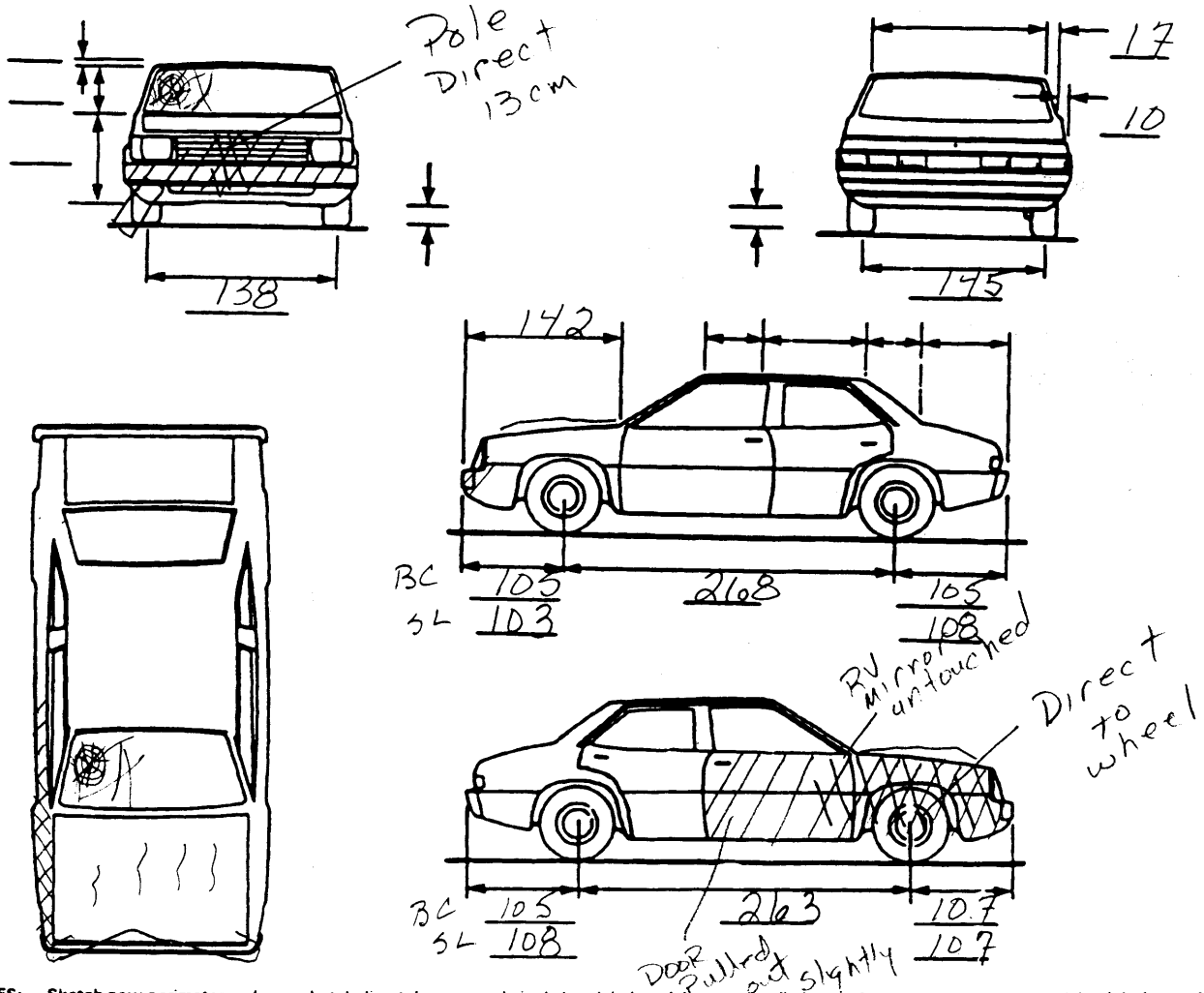
Submodel Designation: {specify}	Color: {specify}	Repair Cost: \$
Transmission: {circle} <u>Automatic</u> Manual	Speed: <u>3-speed</u> 4-speed 5-speed Other:	
Steering: {circle} <u>Power-assisted</u> Manual	Type: <u>rack-and-pinion</u> worm-and-gear Other	
{please describe}:		
Brakes: {circle} <u>Power-assisted</u> Manual	Type: 4-wheel disc <u>4-wheel drum</u> 4-wheel hydraulic	
<u>front disc, rear drum</u> Other:		
Observed Defects: {specify}		
Fleet Type: {circle} <u>Private vehicle</u> Rental vehicle Leased vehicle Commercial vehicle Other		
{please describe}:		



## VEHICLE DAMAGE SKETCH

<b>TIRE—WHEEL DAMAGE</b> a. Rotation physically restricted RF <u>1</u> LF <u>2</u> RR <u>2</u> LR <u>2</u> (1) Yes, (2) No (8) NA (9) Unk.		<b>ORIGINAL SPECIFICATIONS</b> Wheelbase <u>266</u> cm Overall Length <u>478</u> cm Maximum Width <u>176</u> cm Curb Weight <u>1232</u> kg Average Track <u>147</u> cm Front Overhang <u>103</u> cm Rear Overhang <u>108</u> cm Undeformed End Width <u>160</u> cm Engine Size: cyl./displ. <u>2.5 I4</u> L		<b>WHEEL STEER ANGLES</b> (For locked front wheels or displaced rear axles only) RF $\pm$ <u>30</u> ° LF $\pm$ _____ ° RR $\pm$ _____ ° LR $\pm$ _____ ° Within $\pm$ 5 degrees
<b>TYPE OF TRANSMISSION</b> <input type="checkbox"/> Manual <input checked="" type="checkbox"/> Automatic		<b>DRIVE WHEELS</b> <input checked="" type="checkbox"/> FWD <input type="checkbox"/> RWD <input type="checkbox"/> 4WD		
		Approximate Cargo Weight _____ kg		

## MEASUREMENTS IN CENTIMETERS



**NOTES:** Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.

Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

**CHEVROLET Division, General Motors Corp., Mich.**

Type of Body Pass. Cap.	Model	O'r-all Length	Ship. Wt.	Cu. Ft. Vol.	Factory List Pr.	Factory Del'd Pr.
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**1985**

steel belted radial Eagle VR50 (Goodyear), 32 lbs., front and rear. Power steering. Battery 12V-550 amps. (CCA), 90 min. reserve capacity.

NOTE: The 1985 prices for Chevrolet do not include the Destination Charges printed here:

Chevrolet Caprice						
Classic & Impala	\$475.00	Camaro	\$414.00	Chevette		\$290.00
Monte Carlo	414.00	Citation II	370.00	Sprint		190.00
Celebrity	414.00	Cavalier	370.00	Corvette		475.00

**1986**

(Prices Effective 1985)

**CHEVROLET Chevette Series (Gas Eng. (L17) L-4-Cyl. 98 CID, 1.6 L.,) Sept. 3, 1985**  
Bore & Stroke 2.98"x3.66"; Tax. H.P. 16.69; P.D. 98 cu. in., 1.6 Liter

**Chevette "CS" Base Models— W.B.: Coupe 94.3"; Sedan 97.3". Manual 4-Spd. Trans.**

4-Ps. 2-dr. H.B. Coupe	1TB08	161.9"	2.022	305.7	\$5,935.00	\$5,935.00
4-Ps. 4-dr. H.B. Sedan	1TB68	164.9"	2.083	311.4	6,249.00	6,249.00

NOTE: 1986 Chevette Manufacturer's Suggested Retail Price includes \$290 destination charges

**Engine (L17) Gas:** L-4-cyl., 98 cu. in., 1.6 Liter, 2-bbl. Carb., Comp. Ratio 9.0 to 1, Net bhp. 65 at 5200 rpm., Net torque 80 lb./ft. at 3200 rpm., Manual 4-Spd. Trans. Fuel Tank 12.2 gals. Single exhaust. Brakes Disc— front, duo-servo drum— rear. Tires P155/80R-13 (BW) Steel belted radial. Manual steering. Battery: Delco 12V 330 amps, 60 min. reserve

(1) Standard on Z90 Diesel Model.

**Optional Equip.:** Air conditioning, add 60 lbs. \$645; Power Brakes, add 7 lbs. \$100(1); 5-Spd. Manual Trans., add 31 lbs. \$75(1); 3-Spd. Auto. Trans. (MXI), add 51 lbs. \$425; Comfortilt Steering add 4 lbs. \$115; Power Steering, add 20 lbs. \$215; AM Radio, add 4 lbs. \$51; AM/FM Radio, add 5 lbs. \$82; Diesel Engine Equipment, add 173 lbs. NC (L15 1.8 Liter L4 Diesel). Defogger, Elect. Rear Window, add 2 lbs. \$135. Calif. Emission System \$99. Tinted Glass, all Windows \$99.

**CHEVROLET Cavalier (Gas Eng. (LQ5) L-4-Cyl. 121 CID, 2.0 L.,) 1985**  
Bore & Stroke 3.50"x3.15"; Tax. H.P. 19.6; P.D. 121 cu. in. (2.0 Liter)

**Cavalier— 101.2" w.b. (Notchback Coupe, Sedan & Station Wagon)**

5-Ps. 2-dr. NB Coupe	1JC27	174.3"	2.231	330.6	\$7,076.00	\$7,076.00
5-Ps. 4-dr. NB Sedan	1JC69	174.3"	2.274	348.4	7,258.00	7,258.00
5-Ps. 4-dr. Sta. Wagon	1JC35	174.5"	2.344	353.5	7,417.00	7,417.00

**Cavalier "CS"— 101.2" w.b. (Hatchback Coupe, Notchback Sdn., Station Wagon)**

5-Ps. 2-dr. HB Coupe	1JD77	172.4"	2.306	330.6	\$7,743.00	\$7,743.00
5-Ps. 4-dr. NB Sedan	1JD69	174.3"	2.287	348.4	7,720.00	7,720.00
5-Ps. 4-dr. Station Wagon	1JD35	174.5"	2.355	353.5	7,895.00	7,895.00

**Cavalier "RS"— 101.2" w.b. (Notchback Cpe. & Sdn., Hatchback Cpe., Station Wagon)**

5-Ps. 2-dr. NB Coupe	1JE27	172.4"	2.257	330.6	\$8,010.00	\$8,010.00
5-Ps. 2-dr. HB Coupe	1JE77	172.4"	2.319	330.6	8,200.00	8,200.00
5-Ps. 4-dr. NB Sedan	1JE69	174.3"	2.299	348.4	8,181.00	8,181.00
5-Ps. 4-dr. Station Wagon	1JE35	174.5"	2.371	353.5	8,349.00	8,349.00

**Engine (LQ5) Gas:** L-4-Cyl. 121 cu. in. (2.0 Liter), EFI Carb., Comp. Ratio 9.0 to 1, Net bhp. 85 at 4800 rpm., Net Torque 110 at 2400 rpm.

**Optional Equipment:** V6-173 CID— 2.8 L. Gas Eng., add 120 lbs. \$610; 5-Spd. Manual Trans., add 11 lbs. \$75; Auto. Trans. 61 lbs. \$465; Removable Sun Roof, add 16 lbs. \$310; Power Door Lock Systems: 2-dr. 4 lbs. \$130; 4-dr. 6 lbs. \$180; Power Liftgate Release (Sta. Wags.) 3 lbs. \$40; Power Windows: (Stand. on Conv.) 2-drs. 7 lbs. \$195; 4-drs. 11 lbs. \$270; Rear Window Wiper & Washer (Sta. Wags. & Hatchbacks) 8 lbs. \$125; Electric Rear Window Defogger 1 lb. \$135; Air Conditioning: w/4 & 5-Spd. Man. Trans. 40 lbs. \$645; with Auto. Trans. 44 lbs. \$645; Electronic Speed Control 4 lbs. \$175; Comfortilt Steering Wheel add 3 lbs. \$115; Power Steering (Cavalier & "CS" Series) add 21 lbs. \$215; AM/FM Stereo Radio— ETR, add 3 lbs. \$158; (Cavalier Series \$258); AM/FM Stereo Radio, Cassette Player— ETR, add 3 lbs. \$319; (Cavalier Series \$419); AM Radio 4 lbs. \$112; (Cavalier Series— Standard on all other models). Roof Carrier (Station Wagons) 17 lbs. \$105. Calif. Emission System \$99. Tinted Glass, all windows \$99.

**Celebrity & Camaro Series (Gas Eng. (LR8) L-4-Cyl. 151 CID, 2.5 L.,) 1985**  
Bore & Stroke 4.0"x3.0"; Tax. H.P. 25.6; P.D. 151 cu. in. (2.5 Liters)

**Celebrity— 104.9" w.b. (Front Wheel Drive) Manual 4-Spd. Trans.**

6-Ps. 2-dr. Notchback Coupe	1AW27	188.3"	2.609	408.5	\$9,149.00	\$9,149.00
6-Ps. 4-dr. Notchback Sedan	1AW19	188.3"	2.638	408.5	9,345.00	9,345.00
6-Ps. 4-dr. Station Wagon	1AW35	190.8"	2.770	415.5	9,495.00	9,495.00
8-Ps. 4-dr. Sta. Wag. w/3rd seat	1AW35	190.8"	2.783	415.5	9,727.00	9,727.00

**Camaro— 101.0" w.b. (Rear Wheel Drive) Manual 5-Spd. Trans.**

4-Ps. 2-dr. Sport Coupe	1FP87	188.0"	2.820	396.0	\$9,349.00	\$9,349.00
4-Ps. 2-dr. Berlinetta Sp. Cpe.	1FS87	188.0"	2.986	396.0	12,316.00	12,316.00

**Engines (LR8 & LQ9) Gas:** L-4-Cyl. 151 CID 2.5 L., EFI Carb., Comp. ratio 9.0 to 1, Net brake HP: LR8 has 92 at 4400 rpm. & torque of 134 ft. lbs. at 2800 rpm.; LQ9 has net bhp. of 88 at 4400 rpm., torque of 130 ft. lbs. at 2800 rpm. Gas tank 15.7 gals.

**Chevrolet Cavalier "RS" & Z24 (Gas Eng. (LB6) V6-173 CID— 2.8 L.,) 1985**  
Bore & Stroke 3.50"x2.99"; Tax. H.P. 29.4; P.D. 173 cu. in. (2.8 Liters)

**Cavalier "RS"— 101.2" w.b. Front Wheel Drive. Manual 4-Spd. Trans.**

4-Ps. 2-dr. Convertible Coupe	1JE67	172.4"	2.376	347.0	\$12,900.00	\$12,900.00
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**Cavalier Z24— 101.2" w.b., Front Wheel Drive, Manual 4-Spd. Trans.**

5-Ps. 2-dr. Notchback Coupe	1JF27	172.4"	2.451	330.6	\$9,248.00	\$9,248.00
5-Ps. 2-dr. Hatchback Coupe	1JF77	172.4"	2.513	330.6	9,438.00	9,438.00

**Engine (LB6) Gas:** V6-Cyl. 173 cu. in., 2.8 Liter, MFI Carb., Comp. Ratio 8.5 to 1, net bhp. 120 at 4800 rpm., net torque 155 ft. lbs. at 3600 rpm., single exhaust.





## COLLISION DEFORMATION CLASSIFICATION

## HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>01</u>	5. <u>01</u>	6. <u>03</u>	7. <u>R</u>	8. <u>Y</u>	9. <u>E</u>	10. <u>W</u>	11. <u>02</u>

## Second Highest Delta "V"

12. <u>02</u>	13. <u>51</u>	14. <u>12</u>	15. <u>F</u>	16. <u>C</u>	17. <u>E</u>	18. <u>N</u>	19. <u>01</u>
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## CRUSH PROFILE IN CENTIMETERS

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)

## HIGHEST DELTA "V"

20. L	21. C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	C <sub>4</sub>	C <sub>5</sub>	C <sub>6</sub>	22. ±D
<u>199</u>	<u>000</u>	<u>003</u>	<u>011</u>	<u>006</u>	<u>006</u>	<u>000</u>	<u>⊕ 154</u>

## Second Highest Delta "V"

23. L	24. C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	C <sub>4</sub>	C <sub>5</sub>	C <sub>6</sub>	25. ±D
<u>144</u>	<u>000</u>	<u>002</u>	<u>012</u>	<u>018</u>	<u>002</u>	<u>000</u>	<u>⊕ 014</u>

## 26. Undeformed End Width

(Coded when highest severity impact is an end plane impact.)

Code to the nearest centimeter

(250) 250 centimeters or more

(998) No highest severity end plane impact

(999) Unknown

160

## 27. Direct Damage Width

(For highest severity impact)

Code to the nearest centimeter

(250) 250 centimeters or more

(999) Unknown

154

## 28. Original Wheelbase

Code to the nearest centimeter

(650) 650 centimeters or more

(999) Unknown

104.9 inches X 2.54 = 266.4 centimeters

266

## 29. Original Average Track Width

Code to the nearest centimeter

(185) 185 centimeters or more

(999) Unknown

57.8 inches X 2.54 = 146.9 centimeters

147

**FUEL SYSTEM**

30. Are CDCs Documented  
but Not Coded on The  
Automated File?

- (0) No  
(1) Yes

31. Researcher's Assessment of Vehicle  
Disposition

- (0) Not towed due to vehicle damage  
(1) Towed due to vehicle damage  
(9) Unknown

32. Is This A Multi-Stage Manufactured Vehicle  
And/Or A Certified Altered Vehicle?

- (0) No post manufacturer modifications  
(1) Yes - post manufacturer modifications  
(specify): \_\_\_\_\_

(Include photograph of CERTIFICATION  
PLACARD in case report)

- (9) Unknown if vehicle is modified

35. Location of Fuel Tank-1 Filler Cap

36. Location of Fuel Tank-2 Filler Cap

- (0) No fuel tank  
(1) On back plane  
(2) Aft of center of the rear wheels (rear axle)  
on left side plane  
(3) Aft of center of the rear wheels (rear axle)  
on right side plane  
(4) Forward of center of the rear wheels (rear  
axle) on left side plane  
(5) Forward of center of the rear wheels (rear  
axle) on right side plane  
(6) Over the center of the rear wheels (rear  
axle) on left side plane  
(7) Over the center of the rear wheels (rear  
axle) on right side plane  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown

37. Type of Fuel Tank-1

38. Type of Fuel Tank-2

- (0) No fuel tank (electrical vehicle)  
(1) Metallic  
(2) Non-metallic  
(9) Unknown

39. Location of Fuel Tank-1

40. Location of Fuel Tank-2

- (0) No fuel tank  
(1) Aft of center of the rear wheels (rear axle)  
centered  
(2) Aft of center of the rear wheels (rear axle)  
left side  
(3) Aft of center of the rear wheels (rear axle)  
right side  
(4) Forward of center of the rear wheels (rear  
axle) centered  
(5) Forward of center of the rear wheels (rear  
axle) left side  
(6) Forward of center of the rear wheels (rear  
axle) right side  
(7) Over center of the rear wheels (rear axle)  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown

41. Damage to Fuel Tank-1

42. Damage to Fuel Tank-2

- (0) No fuel tank  
(1) No damage to fuel tank  
(2) Deformed, no seam failure  
(3) Deformed, with a seam failure  
(4) Punctured  
(5) Lacerated (ripped)  
(6) Abraded (scraped)  
(7) Filler neck separation from the fuel tank  
(8) Other damage (specify): \_\_\_\_\_  
(9) Unknown

**FIRE OCCURRENCE**

33. Fire Occurrence

- (0) No fire

Yes, fire occurred

- (1) Minor  
(2) Major  
(9) Unknown

34. Origin of Fire

- (0) No fire  
(1) Vehicle exterior (front, side, back, top)  
(2) Exhaust system  
(3) Fuel tank (and other fuel retention  
system parts)  
(4) Engine compartment  
(5) Cargo/trunk compartment  
(6) Instrument panel  
(7) Passenger compartment area  
(8) Other location (specify): \_\_\_\_\_

- (9) Unknown

<p>43. Leakage Location of Fuel System-1 <span style="float: right;"><u>1</u></span></p> <p>44. Leakage Location of Fuel System-2 <span style="float: right;"><u>0</u></span></p> <p>(0) No fuel tank (1) No fuel leakage</p> <p><i>Primary Area Of Leakage</i></p> <p>(2) Tank (3) Filler neck (4) Cap (5) Lines/pump/filter (6) Vent/emission recovery (8) Other (specify): _____ (9) Unknown</p> <p>45. Fuel Type-1 <span style="float: right;"><u>01</u></span></p> <p>46. Fuel Type-2 <span style="float: right;"><u>00</u></span></p> <p><i>Single Fuel Type</i></p> <p>(00) No fuel tank (01) Gasoline (02) Diesel (03) CNG (Compressed Natural Gas) (04) LPG (Liquid Petroleum Gas) also known as Propane (05) LNG (Liquid Natural Gas) (06) Methanol (M100 or M85) (07) Ethanol (E100 or E85) (08) Other (Hydrogen or others) (specify): _____</p> <p>_____</p> <p><i>Electric Powered or Electric/Solar Powered Vehicles</i></p> <p>(10) Lead Acid Battery (11) Nickel-Iron Battery (12) Nickel-Cadmium Battery (13) Sodium Metal Chloride Battery (14) Sodium Sulfur Battery (18) Other (Specify): _____</p> <p>(98) Other Hybrid (specify): _____</p> <p>(99) Unknown fuel type</p>	<p>47. Is This Vehicle Equipped With More Than Two Fuel Tanks? <span style="float: right;"><u>0</u></span></p> <p>(0) No (one or two tanks only)</p> <p><i>Yes - More Than Two Tanks</i></p> <p>(1) Yes -- <u>no damage</u> to any tank or filler cap and <u>no fuel system leakage</u></p> <p>(2) Yes -- <u>no damage</u> to any tank or filler cap but <u>there is fuel system leakage</u> (specify leakage location): _____</p> <p>(3) Yes -- <u>damage</u> to an additional tank or filler cap and <u>there is fuel system leakage</u> (specify the following): Type of tank _____ Tank location _____ Filler cap location _____ Tank damage _____ Location of leakage _____ Type of fuel _____</p> <p>(9) Unknown if more than two tanks</p>
<p><b>COMMENTS</b></p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	
<p>*** STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED ***</p> <p>(GV10=0)</p> <p>DO NOT COMPLETE THE INTERIOR VEHICLE FORM.</p>	



## INTERIOR VEHICLE FORM

1. Primary Sampling Unit Number 10

2. Case Number - Stratum 9612

3. Vehicle Number 02

### INTEGRITY

4. Passenger Compartment Integrity 00

(00) No integrity loss

Yes, Integrity Was Lost Through

(01) Windshield

(02) Door (side)

(03) Door/hatch (back door)

(04) Roof

(05) Roof glass

(06) Side window

(07) Rear window (backlight)

(08) Roof and roof glass

(09) Windshield and door (side)

(10) Windshield and roof

(11) Side and rear window (side window and backlight)

(12) Windshield and side window

(13) Door and side window

(98) Other combination of above (specify):

(99) Unknown

Door, Tailgate or Hatch Opening

5. LF 1 6. RF 1 7. LR 1 8. RR 1 9. TG/H 0

(0) No door/gate/hatch

(1) Door/gate/hatch remained closed and operational

(2) Door/gate/hatch came open during collision

(3) Door/gate/hatch jammed shut

(8) Other (specify):

(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09  $\neq$  2, Then code 0

10. LF 0 11. RF 0 12. LR 0 13. RR 0 14. TG/H 0

(0) No door/gate/hatch or door not opened

Door, Tailgate or Hatch Came Open During Collision

(1) Door operational (no damage)

(2) Latch/striker failure due to damage

(3) Hinge failure due to damage

(4) Door structure failure due to damage

(5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage

(6) Latch/striker and hinge failure due to damage

(8) Other failure (specify):

(9) Unknown

### GLAZING

Type of Window/Windshield Glazing

15. WS 1 16. LF 4 17. RF 4 18. LR 4 19. RR 4

20. BL 4 21. Roof 0 22. Other 4

(0) No glazing

(1) AS-1 - Laminated

(2) AS-2 - Tempered

(3) AS-3 - Tempered-tinted (original)

(4) AS-2 - Tempered-with after market tint

(5) AS-3 - Tempered-tinted (with additional after market tint)

(6) AS-14 - Glass/Plastic

(7) Glazing removed prior to accident

(8) Other (specify):

(9) Unknown

Window Precrash Glazing Status

23. WS 1 24. LF 2 25. RF 2 26. LR 2 27. RR 2

28. BL 2 29. Roof 0 30. Other 2

(0) No glazing

(1) Fixed

(2) Closed

(3) Partially opened

(4) Fully opened

(7) Glazing removed prior to accident

(9) Unknown

Glazing Damage from Impact Forces

31. WS 1 32. LF 1 33. RF 1 34. LR 1 35. RR 1

36. BL 1 37. Roof 0 38. Other 0

(0) No glazing

(1) No glazing damage from impact forces

(2) Glazing in place and cracked from impact forces

(3) Glazing in place and holed from impact forces

(4) Glazing out-of-place (cracked or not) and not holed from impact forces

(5) Glazing out-of-place and holed from impact forces

(6) Glazing disintegrated from impact forces

(7) Glazing removed prior to accident

(9) Unknown if damaged

Glazing Damage from Occupant Contact

39. WS 3 40. LF 1 41. RF 1 42. LR 1 43. RR 1

44. BL 1 45. Roof 0 46. Other 1

(0) No glazing

(1) No occupant contact to glazing

(2) Glazing contacted by occupant but no glazing damage

(3) Glazing in place and cracked by occupant contact

(4) Glazing in place and holed by occupant contact

(5) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact

(6) Glazing out-of-place by occupant contact and holed by occupant contact

(7) Glazing removed prior to accident

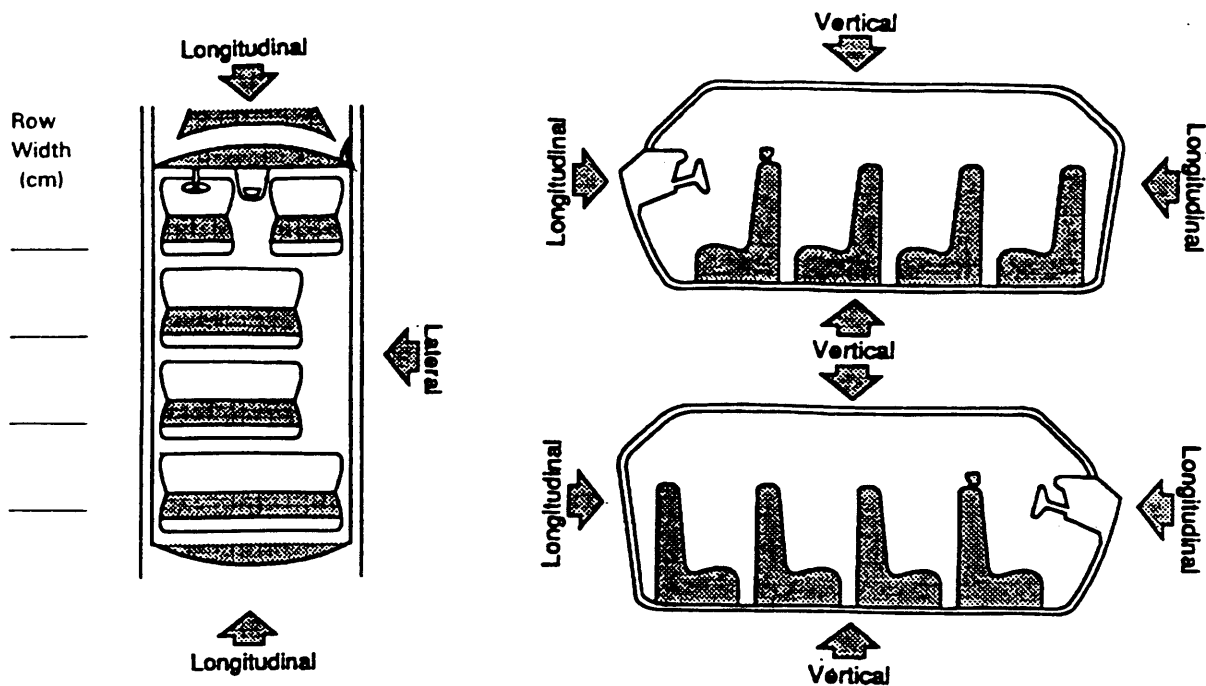
(8) Glazing disintegrated by occupant contact

(9) Unknown if contacted by occupant



# INTRUSION WORKSHEET

Note: Sketch intruded areas



LOCATION OF INTRUSION	INTRUDED COMPONENT	(All Measurements Are In Centimeters)			DOMINANT CRUSH DIRECTION
		COMPARISON VALUE	INTRUDED VALUE	INTRUSION	
13	SIDE Panel forward A-Pillar	-	-	=	
		-	-	=	
		-	-	=	
		-	-	=	
		-	-	=	
		-	-	=	
		-	-	=	
		-	-	=	
		-	-	=	
		-	-	=	
		-	-	=	
		-	-	=	
		-	-	=	
		-	-	=	
		-	-	=	
		-	-	=	

## OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47. <u>13</u>	48. <u>10</u>	49. <u>1</u>	50. <u>3</u>
2nd	51. _____	52. _____	53. _____	54. _____
3rd	55. _____	56. _____	57. _____	58. _____
4th	59. _____	60. _____	61. _____	62. _____
5th	63. _____	64. _____	65. _____	66. _____
6th	67. _____	68. _____	69. _____	70. _____
7th	71. _____	72. _____	73. _____	74. _____
8th	75. _____	76. _____	77. _____	78. _____
9th	79. _____	80. _____	81. _____	82. _____
10th	83. _____	84. _____	85. _____	86. _____

## INTRUDING COMPONENT

## Interior Components

- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A (A1/A2)-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Side panel - forward of the A1/A2-pillar
- (11) Door panel (side)
- (12) Side panel - rear of the B-pillar
- (13) Roof (or convertible top)
- (14) Roof side rail
- (15) Windshield
- (16) Windshield header
- (17) Window frame
- (18) Floor pan (includes sill)
- (19) Backlight header
- (20) Front seat back
- (21) Second seat back
- (22) Third seat back
- (23) Fourth seat back
- (24) Fifth seat back
- (25) Seat cushion
- (26) Back door/panel (e.g., tailgate)
- (27) Other interior component (specify): \_\_\_\_\_

## Exterior Components

- (30) Hood
- (31) Outside surface of this vehicle (specify): \_\_\_\_\_
- (32) Other exterior object in the environment (specify): \_\_\_\_\_
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify): \_\_\_\_\_
- (99) Unknown

## LOCATION OF INTRUSION

Front Seat  
 (11) Left  
 (12) Middle  
 (13) Right

Second Seat  
 (21) Left  
 (22) Middle  
 (23) Right

Third Seat  
 (31) Left  
 (32) Middle  
 (33) Right

Fourth Seat  
 (41) Left  
 (42) Middle  
 (43) Right

(97) Catastrophic  
 (98) Other enclosed area (specify) \_\_\_\_\_

(99) Unknown

## MAGNITUDE OF INTRUSION

- (1)  $\geq 3$  centimeters but  $< 8$  centimeters
- (2)  $\geq 8$  centimeters but  $< 15$  centimeters
- (3)  $\geq 15$  centimeters but  $< 30$  centimeters
- (4)  $\geq 30$  centimeters but  $< 46$  centimeters
- (5)  $\geq 46$  centimeters but  $< 61$  centimeters
- (6)  $\geq 61$  centimeters
- (7) Catastrophic
- (9) Unknown

## DOMINANT CRUSH DIRECTION

- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown

STEERING RIM/SPOKE DEFORMATION

(All Measurements Are in Centimeters)

COMPARISON VALUE	—	DAMAGE VALUE	=	DEFORMATION
No	—	Deformation	=	
	—		=	
	—		=	
	—		=	

## STEERING COLUMN

## INSTRUMENT PANEL

87. Steering Column Type 1

- (1) Fixed column  
 (2) Tilt column  
 (3) Telescoping column  
 (4) Tilt and telescoping column  
 (8) Other column type (specify):  
 (9) Unknown

88. Tilt Steering Column Adjustment 0

- (0) No tilt steering column  
 (1) Full up  
 (2) Between full up and center  
 (3) Center  
 (4) Between center and full down  
 (5) Full down  
 (9) Unknown

89. Telescoping Steering Column Adjustment 0

- (0) No telescoping steering column  
 (1) Full back  
 (2) Between full back and midpoint  
 (3) Midpoint  
 (4) Between midpoint and full forward  
 (5) Full forward  
 (9) Unknown

90. Steering Rim/Spoke Deformation 00

- Code actual measured  
 deformation to the nearest centimeter  
 (00) No steering rim deformation  
 (01-14) Actual measured value in centimeters  
 (15) 15 centimeters or more  
 (98) Observed deformation cannot be measured  
 (99) Unknown

91. Location of Steering Rim/Spoke Deformation 00

- (00) No steering rim deformation

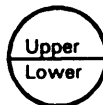
## Quarter Sections

- (01) Section A  
 (02) Section B  
 (03) Section C  
 (04) Section D



## Half Sections

- (05) Upper half of rim/spoke  
 (06) Lower half of rim/spoke  
 (07) Left half of rim/spoke  
 (08) Right half of rim/spoke  
 (09) Complete steering wheel collapse  
 (10) Undetermined location  
 (99) Unknown

92. Odometer Reading 155,000

- \_\_\_\_\_ kilometers  
 Code to the nearest 1,000 kilometers  
 (000) No odometer  
 (001) Less than 1,500 kilometers  
 (500) 499,500 kilometers or more  
 (999) Unknown  
96,494 miles x 1.6093 = 155,292 kilometers

Source: ODOMETER

93. Instrument Panel Damage from Occupant Contact? 1

- (0) No  
 (1) Yes  
 (9) Unknown

94. Type of Knee Bolster Covering 0

- (0) No knee bolster  
 (1) Padded  
 (2) Rigid plastic  
 (8) Other (specify):  
 (9) Unknown

95. Knee Bolsters Deformed from Occupant Contact? 0

- (0) No knee bolster  
 (1) No deformation  
 (2) Yes - deformation  
 (9) Unknown

96. Did Glove Compartment Door Open During Collision(s)? 2

- (0) No glove compartment door  
 (1) No - door did not open  
 (2) Yes - door opened  
 (9) Unknown

97. Adaptive (Assistive) Driving Equipment 0

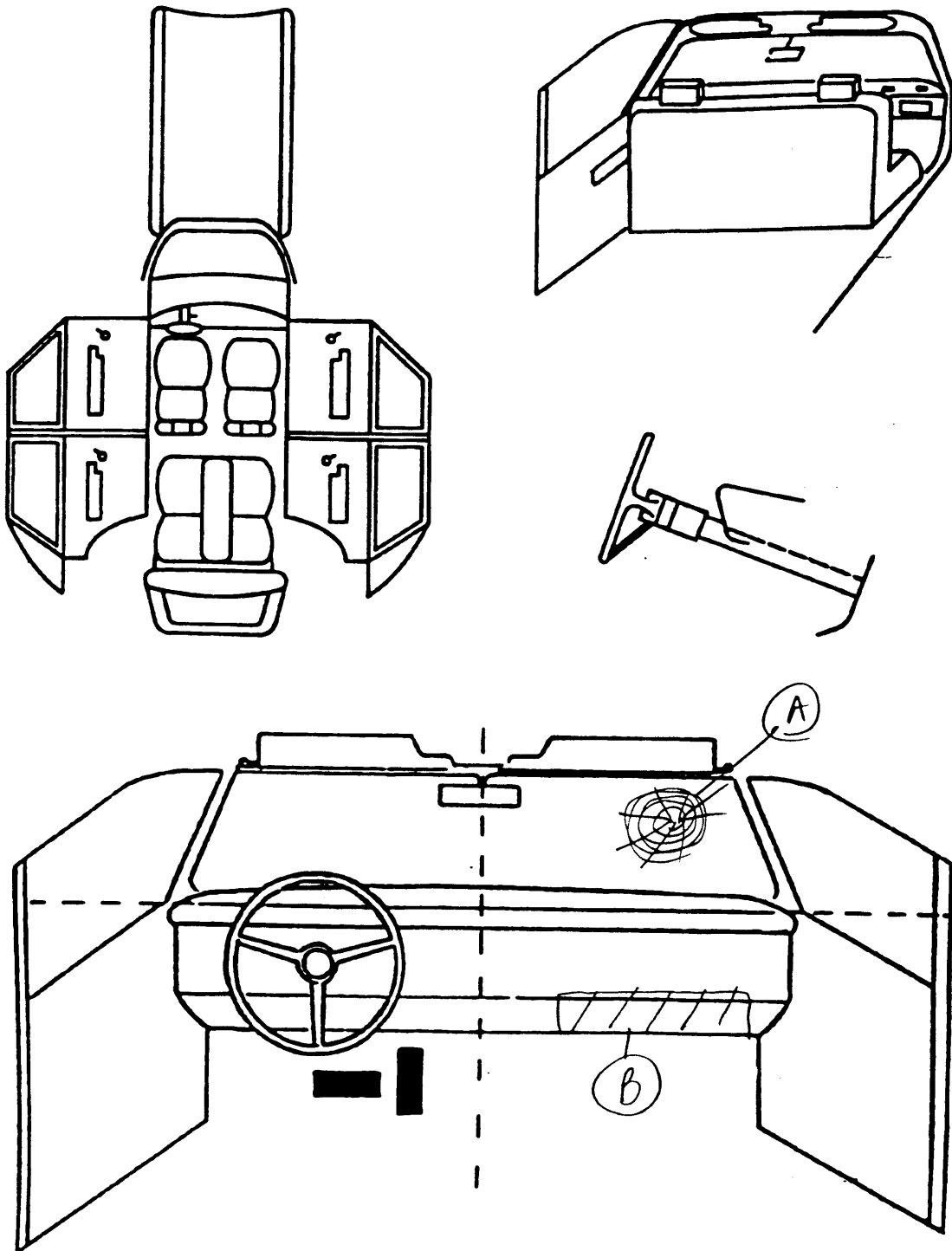
- (0) No adaptive driving equipment  
 (1) Adaptive driving equipment installed  
 (Check all that apply.)  
☐ Hand controls for braking/acceleration  
☐ Steering control devices (attached to OEM steering wheel)  
☐ Steering knob attached to steering wheel  
☐ Low effort power steering (unit or device)  
☐ Replacement steering wheel (i.e., reduced diameter)  
☐ Joy-stick steering controls  
☐ Wheelchair tie-downs  
☐ Modification to seat belts (specify):  
☐ Additional or relocated switches (specify):  
☐ Raised roof  
☐ Wall-mounted head rest (used behind wheelchair)  
☐ Other adaptive device (specify):

(9) Unknown



## VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).  
Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.  
Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

## POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	001	01	HEAD/FACE	SPIDER WEB / GREASE	1
B	013	01	Legs	BROKEN / JAMMED open	1
C					
D					
E					
F					
G					
H					
I					
J					
K					
L					
M					
N					

## CODES FOR INTERIOR COMPONENTS

## FRONT

- (001) Windshield  
 (002) Mirror  
 (003) Sunvisor  
 (004) Steering wheel rim  
 (005) Steering wheel hub/spoke  
 (006) Steering wheel (combination of codes 004 and 005)  
 (007) Steering column, transmission selector lever, other attachment  
 (008) Cellular telephone or CB radio  
 (009) Add on equipment(e.g., tape deck, air conditioner)  
 (010) Left instrument panel and below  
 (011) Center instrument panel and below  
 (012) Right instrument panel and below  
 (013) Glove compartment door  
 (014) Knee bolster  
 (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)  
 (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)  
 (017) Windshield reinforced by exterior object, (specify):  
 (019) Other front object (specify):

## LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests  
 (052) Left side hardware or armrest  
 (053) Left A (A1/A2)-pillar  
 (054) Left B-pillar  
 (055) Other left pillar (specify):  
 (056) Left side window glass  
 (057) Left side window frame  
 (058) Left side window sill  
 (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.  
 (060) Other left side object (specify):  
 RIGHT SIDE  
 (101) Right side interior surface, excluding hardware or armrests  
 (102) Right side hardware or armrest  
 (103) Right A (A1/A2)-pillar  
 (104) Right B-pillar  
 (105) Other right pillar (specify):  
 (106) Right side window glass  
 (107) Right side window frame  
 (108) Right side window sill  
 (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.  
 (110) Other right side object (specify):

## INTERIOR

- (151) Seat, back support  
 (152) Belt restraint webbing/buckle  
 (153) Belt restraint B-pillar or door frame attachment point  
 (154) Other restraint system component (specify):  
 (155) Head restraint system  
 (160) Other occupants (specify):  
 (161) Interior loose objects  
 (162) Child safety seat (specify):  
 (163) Other interior object (specify):  
 AIR BAG  
 (170) Air bag-driver side  
 (175) Air bag compartment cover-driver side  
 (180) Air bag-passenger side  
 (185) Air bag compartment cover-passenger side  
 (190) Other air bag (specify)  
 (195) Other air bag compartment cover (specify)

## ROOF

- (201) Front header  
 (202) Rear header  
 (203) Roof left side rail  
 (204) Roof right side rail  
 (205) Roof or convertible top

## FLOOR

- (251) Floor (including toe pan)  
 (252) Floor or console mounted transmission lever, including console  
 (253) Parking brake handle  
 (254) Foot controls including parking brake

## REAR

- (301) Backlight (rear window)  
 (302) Backlight storage rack, door, etc.  
 (303) Other rear object (specify):

## ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration  
 (402) Steering control devices (attached to OEM steering wheel)  
 (403) Steering knob attached to steering wheel  
 (405) Replacement steering wheel (i.e., reduced diameter)  
 (406) Joy stick steering controls  
 (407) Wheelchair tie-downs  
 (408) Modification to seat belts, (specify):  
 (409) Additional or relocated switches, (specify):  
 (410) Raised roof  
 (411) Wall mounted head rest (used behind wheel chair)  
 (412) Other adaptive device (specify):

## CONFIDENCE LEVEL OF CONTACT POINT

- (1) Certain  
 (2) Probable  
 (3) Possible  
 (9) Unknown

# MANUAL RESTRAINTS

**NOTES:** Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

If a Child safety seat is present, encode the data on the back of this page.

If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

		Left	Center	Right
FIRST	Availability	4	3	4
	Evidence of usage	04	00	04
	Used in this crash?	00		
	Proper Use	0		
	Failure Modes	0		
	Anchorage Adjustment	1		1
SECOND	Availability	3	3	3
	Evidence of usage	00	00	00
	Used in this crash?			
	Proper Use			
	Failure Modes			
	Anchorage Adjustment	0	0	0
OTHER	Availability			
	Evidence of usage			
	Used in this crash?			
	Proper Use			
	Failure Modes			
	Anchorage Adjustment			

## Manual (Active) Belt System Availability

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown

## Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify):

- (9) Unknown

## Manual (Active) Belt System Use

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify):

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used - type unknown
- (08) Other belt used (specify):

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat type unknown
- (18) Other belt used with child safety seat (specify):
- (99) Unknown if belt used

## Proper Use of Manual (Active) Belts

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

## Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):
- (8) Other improper use of manual belt system (specify):

- (9) Unknown

## Manual (Active) Belt Failure Modes During Accident

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):
- (6) Broken retractor
- (7) Combination of above (specify):
- (8) Other manual belt failure (specify):
- (9) Unknown

## Shoulder Belt Upper Anchorage Adjustment

- (0) No shoulder belt
- (1) No upper anchorage adjustment for shoulder belt

## Adjustable shoulder Belt Upper Anchorage

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

## AUTOMATIC RESTRAINTS

NOTES: Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

### AIR BAGS

		Left Front	Right Front	Other
F I R S T	Availability/Function	0	0	0
	Deployment	0	0	0
	Failure	0	0	0

#### Air Bag System Availability/Function

(0) Not equipped/not available

(1) Air bag

#### Non-functional

(2) Air bag disconnected (specify): \_\_\_\_\_

(3) Air bag not reinstalled

(9) Unknown

#### Are There Indications of Air Bag System Failure? (This Occupant Position)

(0) Not equipped/not available

(1) No

(2) Yes (specify): \_\_\_\_\_

(9) Unknown

#### Frontal Air Bag System Deployment (This Occupant Position)

(0) Not equipped/not available

(1) Deployed during accident (as a result of impact)

(2) Deployed inadvertently just prior to accident

(3) Deployed, accident sequence undetermined

(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)

(5) Unknown if deployed

(7) Nondeployed

(9) Unknown

#### Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position)

(0) Not equipped with an "other" air bag

(1) Deployed during accident (as a result of impact)

(2) Deployed inadvertently just prior to accident

(3) Deployed, details unknown

(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)

(5) Unknown if deployed

(7) Nondeployed

(9) Unknown

### AUTOMATIC BELTS

		Left	Right
F I R S T	Availability/Function	0	0
	Use	0	0
	Type	0	0
	Proper Use	0	0
	Failure Modes	0	0

#### Automatic (Passive) Belt System Availability/Function

(0) Not equipped/not available

(1) 2 point automatic belts

(2) 3 point automatic belts

(3) Automatic belts - type unknown

#### Non-functional

(4) Automatic belts destroyed or rendered inoperative

(9) Unknown

#### Automatic (Passive) Belt System Use

(0) Not equipped/not available/destroyed or rendered inoperative

(1) Automatic belt in use

(2) Automatic belt not in use (manually disconnected, motorized track inoperative)

(3) Automatic belt use unknown

(9) Unknown

#### Automatic (Passive) Belt System Type

(0) Not equipped/not available

(1) Non-motorized system

(2) Motorized system

(9) Unknown

#### Proper Use of Automatic (Passive) Belt System

(0) Not equipped/not available/not used

(1) Automatic belt used properly

(2) Automatic belt used properly with child safety seat

#### Automatic Belt Used Improperly

(3) Automatic shoulder belt worn under arm

(4) Automatic shoulder belt worn behind back

(5) Automatic belt worn around more than one person

(6) Lap portion of automatic belt worn on abdomen

(7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

(8) Other improper use of automatic belt system (specify): \_\_\_\_\_

(9) Unknown

#### Automatic (Passive) Belt Failure Modes During Accident

(0) Not equipped/not available/not in use

(1) No automatic belt failure(s)

(2) Torn webbing (stretched webbing not included)

(3) Broken buckle or latchplate

(4) Upper anchorage separated

(5) Other anchorage separated (specify): \_\_\_\_\_

(6) Broken retractor

(7) Combination of above (specify): \_\_\_\_\_

(8) Other automatic belt failure (specify): \_\_\_\_\_

(9) Unknown



## FIRST SEAT FRONTAL AIR BAGS

**NOTES:** Encode the applicable data for *the driver and first seat passenger* in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

	Driver	Passenger
Type of air bag?	0	
Flaps open at tear points?	0	
Flaps damaged?	0	
Air bag damaged?	00	
Source of air bag damage	00	
Air bag tethered?	0	
Air bag have vent ports?	0	
Other occupant contact air bag?	0	
Occupant wearing eyewear?	0	

### Type of Air Bag

- (0) Not equipped/not available
- (1) Original manufacturer installed system
- (2) Retrofitted air bag
- (3) Replacement air bag
- (8) Unknown type of air bag
- (9) Unknown

### Did Air Bag Module Cover Flap(s) Open At Designated Tear Points?

- (0) Not equipped/not available
- (1) No
- (2) Yes
- (3) Deployed, unknown if flap(s) opened at designated tear points
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

### Were Air Bag Module Cover Flap(s) Damaged?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (3) Deployed, unknown if air bag module cover flap(s) damaged
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

### Was There Damage To The Air Bag?

- (00) Not equipped/not available
- (01) Not damaged

#### Yes - Air Bag Damage

- (02) Ruptured
- (03) Cut
- (04) Torn
- (05) Holed
- (06) Burned
- (07) Abraded
- (88) Other damage (specify):

- (95) Damaged, details unknown
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

### Source of Air Bag Damage

- (00) Not equipped/not available
- (01) Not damaged
- (02) Object worn by occupant, (specify):
- (03) Object carried by occupant, (specify):
- (04) Adaptive/assistive controls, (specify):
- (05) Fire in vehicle
- (06) Thermal burns
- (07) Rescue or emergency efforts
- (88) Other damage source (specify):
- (95) Damaged, unknown source
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

### Was The Air Bag Tethered?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of tether straps):
- (3) Deployed, unknown if tethered
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

### Did The Air Bag Have Vent Ports?

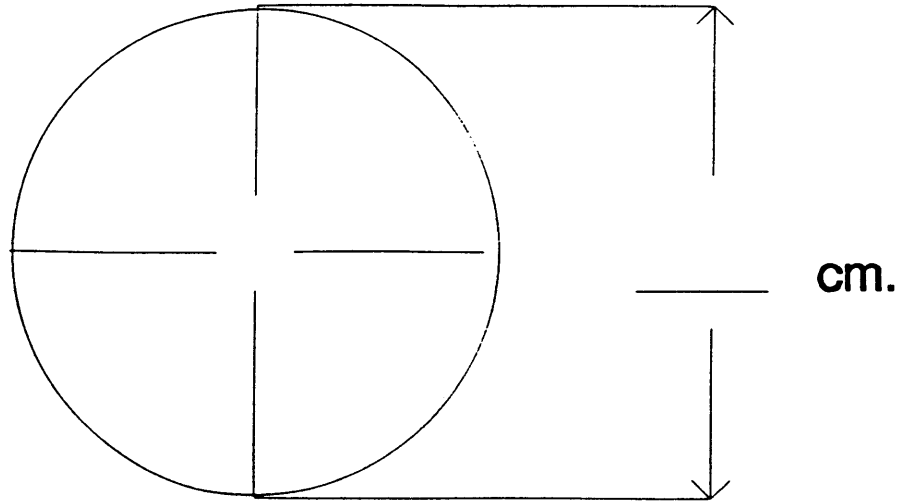
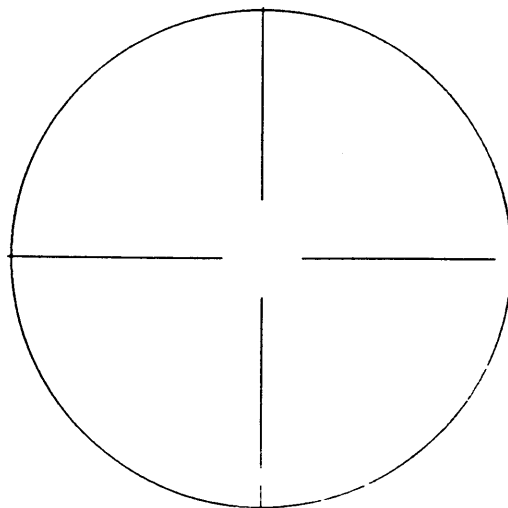
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of vent ports):
- (3) Deployed, unknown if vent ports present
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

### Was the Air Bag in this Occupant's Position Contacted by Another Occupant?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (3) Deployed, unknown if other occupant contact to air bag
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

### Was This Occupant Wearing Eye-wear?

- (0) Not equipped/not available
- (1) No
- (2) Eyeglasses/sunglasses
- (3) Contact lenses
- (4) Deployed, unknown if eyewear worn
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

**DRIVER AIR BAG DAMAGE AND CONTACT SKETCHES****1. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Front)****2. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Back)**

## DRIVER AIR BAG SKETCHES (Cont'd)

### 3. DRIVER AIR BAG MODULE COVER FLAP SIZE, (DOUBLE)

a. Upper Flap

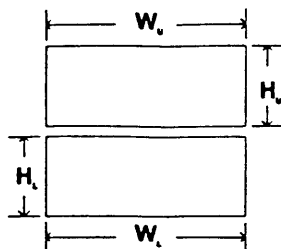
b. Lower Flap

width ( $W_U$ ) \_\_\_\_\_

width ( $W_L$ ) \_\_\_\_\_

height ( $H_U$ ) \_\_\_\_\_

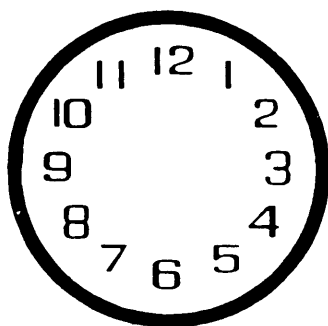
height ( $H_L$ ) \_\_\_\_\_

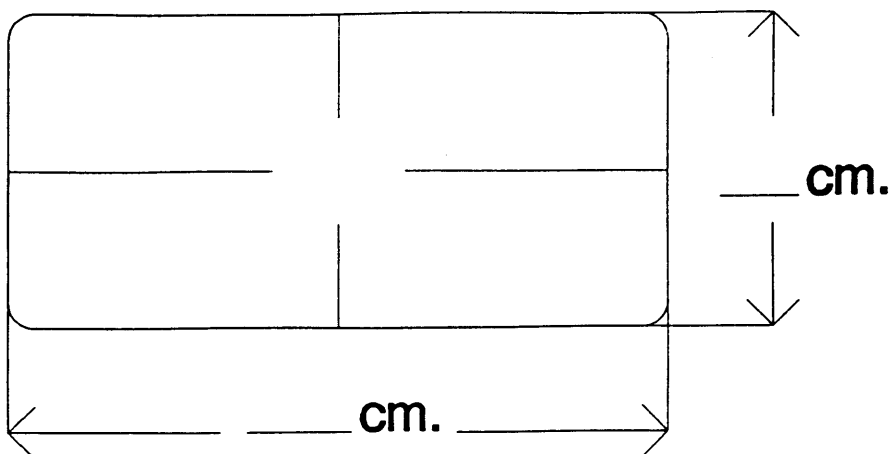
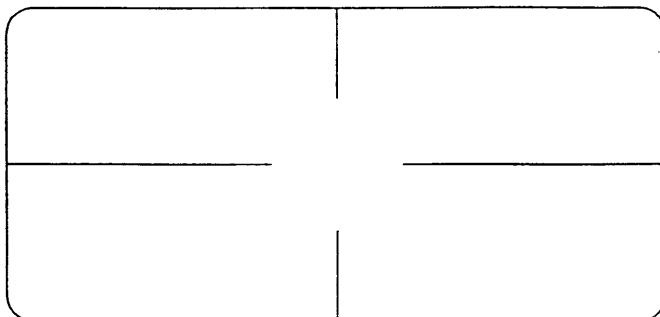


### 4. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE

### 5. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

### 6. SKETCH LOCATION OF CIRCULAR AIR BAG VENT PORTS



**PASSENGER AIR BAG DAMAGE AND CONTACT SKETCHES****1. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Front)****2. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Back)**



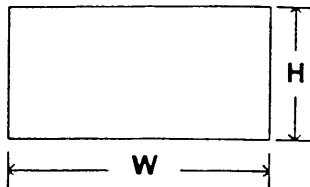
## PASSENGER AIR BAG SKETCHES (Cont'd)

### 3. PASSENGER AIR BAG MODULE COVER FLAP SIZE (SINGLE)

#### a. Flap

width (W) \_\_\_\_\_

height (H) \_\_\_\_\_



### 4. PASSENGER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)

#### a. Upper Flap

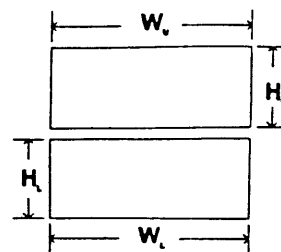
#### b. Lower Flap

width ( $W_U$ ) \_\_\_\_\_

width ( $W_L$ ) \_\_\_\_\_

height ( $H_U$ ) \_\_\_\_\_

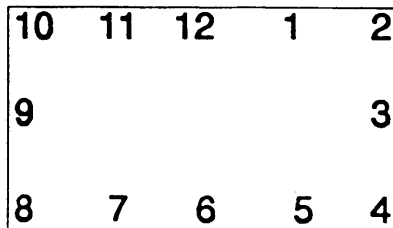
height ( $H_L$ ) \_\_\_\_\_



### 5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE

### 6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

### 7. SKETCH LOCATION OF RECTANGULAR AIR BAG VENT PORTS



**"OTHER" AIR BAG DAMAGE AND CONTACT SKETCHES**

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Front)

2. SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Back)

**"OTHER" AIR BAG SKETCHES (Cont'd)**

**3. SKETCH AIR BAG MODULE FLAP AND SIZE OR OPENING FOR AIRBAG**

**4. SKETCH AIR BAG VENT PORTS**

## HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
F I R S T	Head Restraint Type/Damage	3	0	3
	Seat Type	04	04	04
	Seat Performance	1	1	1
	Seat Orientation	1	1	1
	Seat Track Position	6	6	6
	Seat Back Incline Pre/Post Impact	01	01	01
S E C O N D	Head Restraint Type/Damage	0	0	0
	Seat Type	03	03	03
	Seat Performance	1	1	1
	Seat Orientation	1	1	1
	Seat Track Position	1	1	1
	Seat Back Incline Pre/Post Impact	01	01	01
T H I R D	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
	Seat Track Position			
	Seat Back Incline Pre/Post Impact			
O T H E R	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
	Seat Track Position			
	Seat Back Incline Pre/Post Impact			

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE  
(I.E., UNUSUAL OCCUPANT CONTACT PATTERN)



**HEAD RESTRAINTS/SEAT EVALUATION****Head Restraint Type/Damage by Occupant at This Occupant Position**

- (0) No head restraints
- (1) Integral — no damage
- (2) Integral — damaged during accident
- (3) Adjustable — no damage
- (4) Adjustable — damaged during accident
- (5) Add-on — no damage
- (6) Add-on — damaged during accident
- (8) Other  
Specify: \_\_\_\_\_
- (9) Unknown

**Seat Type (this Occupant Position)**

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): \_\_\_\_\_
- (10) Box mounted seat (i.e., van type)
- (99) Unknown

**Seat Performance (this Occupant Position)**

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed (specify): \_\_\_\_\_
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): \_\_\_\_\_
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

**Seat Orientation (this Occupant Position)**

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

**Seat Track Adjusted Position Prior To Impact**

- (0) Occupant not seated or no seat
- (1) Non-adjustable seat track

**Adjustable Seat Track**

- (2) Seat at forward most track position
- (3) Seat between forward most and middle track positions
- (4) Seat at middle track position
- (5) Seat between middle and rear most track positions
- (6) Seat at rear most track position
- (9) Unknown

**Seat Back Incline Prior and Post Impact**

- (00) Occupant not seated or no seat
- (01) Not adjustable

**Upright prior to impact**

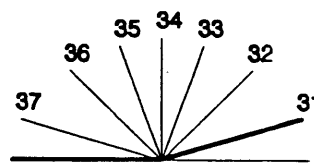
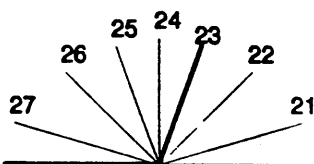
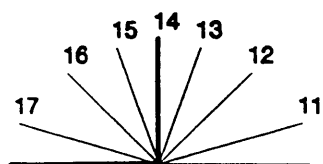
- (11) Moved to completely rearward position
- (12) Moved to rearward midrange position
- (13) Moved to slightly rearward position
- (14) Retained pre-impact position
- (15) Moved to slightly forward position
- (16) Moved to forward midrange position
- (17) Moved to completely forward position

**Slightly reclined prior to impact**

- (21) Moved to completely rearward position
- (22) Moved to rearward midrange position
- (23) Retained pre-impact position
- (24) Moved to upright position
- (25) Moved to slightly forward position
- (26) Moved to forward midrange position
- (27) Moved to completely forward position

**Completely reclined prior to impact**

- (31) Retained pre-impact position
- (32) Moved to rearward midrange position
- (33) Moved to slightly rearward position
- (34) Moved to upright position
- (35) Moved to slightly forward position
- (36) Moved to forward midrange position
- (37) Moved to completely forward position
- (99) Unknown



Coding diagrams for Seat Back Incline Position Prior and Post Impact

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE  
(I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

## CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number						
1. Type of Child Safety Seat	Not	Applicable				
2. Child Safety Seat Orientation						
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model	Specify Below for Each Child Safety Seat					

**1. Type of Child Safety Seat**

- (0) No child safety seat
- (1) Infant seat
- (2) Toddler seat
- (3) Convertible seat
- (4) Booster seat
- (7) Other type child safety seat (specify): \_\_\_\_\_
- (8) Unknown child safety seat type
- (9) Unknown if child safety seat used

**2. Child Safety Seat Orientation**

- (00) No child safety seat
- Designed for Rear Facing for This Age/Weight
- (01) Rear facing
- (02) Forward facing
- (08) Other orientation (specify): \_\_\_\_\_
- (09) Unknown orientation
- Designed for Forward Facing for This Age/Weight
- (11) Rear facing
- (12) Forward facing
- (18) Other orientation (specify): \_\_\_\_\_
- (19) Unknown orientation
- Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight
- (21) Rear facing
- (22) Forward facing
- (28) Other orientation (specify): \_\_\_\_\_
- (29) Unknown orientation

(99) Unknown if child safety seat used

**3. Child Safety Seat Harness Usage**

**4. Child Safety Seat Shield Usage**

**5. Child Safety Seat Tether Usage**

Note: Options Below Are Used for Variables 3-5.

- (00) No child safety seat
- Not Designed with Harness/Shield/Tether
- (01) After market harness/shield/tether added, not used
- (02) After market harness/shield/tether used
- (03) Child safety seat used, but no after market harness/shield/tether added
- (09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether

- (11) Harness/shield/tether not used
- (12) Harness/shield/tether used
- (19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

- (21) Harness/shield/tether not used
- (22) Harness/shield/tether used
- (29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

**6. Child Safety Seat Make/Model**

(Specify make/model and occupant number)

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**EJECTION/ENTRAPMENT DATA**

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

**EJECTION** No ☒ Yes ☐

Describe indications of ejection and body parts involved in partial ejection(s):

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Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						

**Ejection**

- (1) Complete ejection  
(2) Partial ejection  
(3) Ejection, Unknown degree  
(9) Unknown

**Ejection Area**

- (1) Windshield  
(2) Left front  
(3) Right front  
(4) Left rear  
(5) Right rear  
(6) Rear

**(7) Roof**

- (8) Other area (e.g., back of pickup, etc.) (specify):

(9) Unknown

**Ejection Medium**

- (1) Door/hatch/tailgate  
(2) Nonfixed roof structure  
(3) Fixed glazing  
(4) Nonfixed glazing (specify):

**(5) Integral structure**

- (8) Other medium (specify):

(9) Unknown

**Medium Status (Immediately Prior to Impact)**

- (1) Open  
(2) Closed  
(3) Integral structure  
(9) Unknown

**ENTRAPMENT** No ☒ Yes ☐

Describe entrapment mechanism:

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Component(s):

---

(Note in vehicle interior diagram)

**NASS CDS INTERVIEW FORM:**  
**CASE VEHICLE DRIVER**





## INTERVIEW FORM (A)

1. Primary Sampling Unit Number 10 Interviewee(s) Role or Name(s): DRIVER of  
2. Case Number - Stratum 9612 case vehicle  
3. Vehicle Number 01 Phone number: \_\_\_\_\_

Review all available information and interview questions prior to conducting interview(s) to ensure the acquisition of all pertinent data.

If the driver was not the person interviewed, was an appointment made for a follow-up interview?

### DRIVER'S DESCRIPTION OF ACCIDENT EVENTS

I was S/B I saw her come out from  
SIDE street. I beeped horn I then  
slowed down, hit brakes we hit  
the AIR bags went off - smoke in  
CAR I went to back to check on  
other Kids cause I thought VAN was  
ON FIRE I got other 2 Kids out  
I thought [REDACTED] was still in seat  
behind air bag. I then RAN around  
saw her on floor. I then started  
to PRAY.

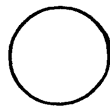
### OCCUPANT'S DESCRIPTION OF ACCIDENT EVENTS

was [REDACTED] belted - I thought she was  
I had just pulled over a few blocks back because  
JANA in back was fussing and took off her seat belt  
When we started up [REDACTED] joked that if she  
didn't get a new Baseball mitt she would take

### SPECIFIC QUESTIONS TO ASK INTERVIEWEE

her seatbelt off. A few seconds later  
the CRASH happened

## ACCIDENT DIAGRAM



NORTH

Use this diagram to aid in relating interviewee accident trajectory data (i.e., pre-impact to FRP orientations) to identifiable objects in the environment.

## CRASH DATA INFORMATION

IF POSSIBLE OBTAIN THIS INFORMATION FROM THE DRIVER:

SOURCE OF INFORMATION:	<input checked="" type="checkbox"/> Driver [ ] Other occupant [ ] Relative/friend
TRAVEL DIRECTION?	[ ] North <input checked="" type="checkbox"/> South [ ] East [ ] West (Or where were they coming from or going to?)
LANE?	<input checked="" type="checkbox"/> 1 [ ] 2 [ ] 3 [ ] 4 [ ] Other Note: lane 1 is the right curb lane
ROAD CONDITION?	<input checked="" type="checkbox"/> Dry [ ] Wet [ ] Snow [ ] Slush [ ] Ice [ ] Sand, dirt, oil [ ] Other (specify)
WEATHER CONDITIONS? (Check all that apply)	<input checked="" type="checkbox"/> No adverse conditions [ ] Rain [ ] Fog [ ] Sleet [ ] Hail [ ] Snow [ ] Other (specify)
SIGN OR SIGNAL PRESENT? (check all that apply)	[ ] Traffic control signal (includes flashing beacons, lane control signals, and green / amber / red signal) [ ] Stop sign [ ] Yield sign [ ] School zone sign [ ] Other regulatory sign (No "U" turn, left turn only, wrong way, etc.) specify: _____ [ ] Warning sign (Winding road sign, stop ahead, intersection signs, etc.) specify: _____ [ ] Miscellaneous control (including railroad controls) specify: _____ [ ] None [ ] Unknown
WAS THE CONTROL FUNCTIONING PROPERLY?	[ ] No traffic control device present [ ] Not functioning properly (includes defaced, badly worn, covered with snow, rotated etc.) specify: _____ [ ] Functioning properly [ ] Unknown
SPEED BEFORE THE IMPACT? (in mph)	[ ] Stopped [ ] 11-20 [ ] 31-40 [ ] 51-60 [ ] 70+ [ ] 1-10 <input checked="" type="checkbox"/> 21-30 [ ] 41-50 [ ] 61-70 [ ] Unknown
BEFORE IMPACT, INTENDING TO ... ? (check all that apply)	<input checked="" type="checkbox"/> Go straight [ ] Stopped [ ] Turn left [ ] Turn right [ ] Slow down [ ] Accelerate [ ] Back up [ ] Change lanes to right [ ] Other (specify): _____ [ ] Change lanes to left
CONTROL LOSS DUE TO WEATHER OR MECHANICAL PROBLEMS?	<input checked="" type="checkbox"/> No [ ] Unknown [ ] Yes (describe)
AVOIDANCE ACTIONS?	[ ] None <input checked="" type="checkbox"/> Braking with lock-up [ ] Accelerating [ ] Unknown [ ] Braking without lock-up [ ] Steering left [ ] Other- specify: _____ [ ] Releasing brakes <input checked="" type="checkbox"/> Steering right
LOCATION OF VEHICLE AT TIME OF IMPACT?	<input checked="" type="checkbox"/> Original travel lane [ ] Different travel lane [ ] In intersection [ ] Off roadway to right [ ] Off roadway to left [ ] Other (specify): _____
SPEED AT THE TIME OF IMPACT? (in mph)	[ ] Stopped <input checked="" type="checkbox"/> 11-20 [ ] 31-40 [ ] 51-60 [ ] 70+ [ ] 1-10 [ ] 21-30 [ ] 41-50 [ ] 61-70 [ ] Unknown
DESCRIBE ALL THE IMPACTS to the vehicle and how this vehicle moved to its stopped position, after the collision?	after car hit me car slid over hit street sign and stopped.

**VEHICLE INFORMATION****ROLLOVER DATA**

DID THIS VEHICLE ROLL OVER DURING THE CRASH?

☐ YES -- ASK THE FOLLOWING QUESTIONS

NO -- SKIP TO "FIRE DATA" BELOW



UNKNOWN -- SKIP TO "FIRE DATA" BELOW

ROLLOVER BEGAN

☐ On roadway    ☐ On shoulder    ☐ On roadside or median  
☐ Unknown

ROLLOVER CAUSE?

☐ Other vehicle (specify vehicle number) \_\_\_\_\_  
☐ Contact to object (specify): \_\_\_\_\_  
☐ Other cause (specify): \_\_\_\_\_  
☐ Unknown

DIRECTION OF VEHICLE ROLL?

☐ Toward the right (passenger side)  
☐ Toward the left (driver side)  
☐ End-over-end  
☐ Unknown

NUMBER OF TURNS

\_\_\_\_ Number of QUARTER TURNS                      ☐ Unknown  
\_\_\_\_ Number of COMPLETE TURNS
PLANE IN CONTACT WITH  
GROUND AT FINAL REST?
☐ Left side    ☐ Top  
☐ Right side    ☐ Wheels  
☐ Unknown
**FIRE DATA**

DID THIS VEHICLE EXPERIENCE A FIRE?

☐ YES -- ASK THE FOLLOWING QUESTIONS

NO -- SKIP THIS SECTION



UNKNOWN -- SKIP THIS SECTION

FIRE STARTED, OR SMOKE  
WAS FIRST SEEN ...
☐ Under the hood                                      ☐ In the trunk/cargo area  
☐ Behind the instrument panel                      ☐ Under the vehicle  
☐ In the passenger compartment                      ☐ From other involved vehicle  
☐ Unknown
FIRE START WITH THE  
ELECTRICAL SYSTEM?☐ No                      ☐ Unknown☐ Yes (specify):FIRE START WITH THE FUEL  
SYSTEM?☐ No                      ☐ Unknown
☐ Yes -- specify Which part of the fuel system may have been involved?  
☐ Fuel tank  
☐ Fuel lines  
☐ Engine compartment (specify component if known)  
☐ Unknown

Describe any additional rollover or fire information here:







**SPECIAL CRASH INVESTIGATION ADDENDUM: DRIVER INFORMATION**

Do you recall the type of development in the area of the crash?	<input checked="" type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/> Undeveloped <input type="checkbox"/> School <input type="checkbox"/> Other: _____
What were the weather conditions at the time of the crash?	<input checked="" type="checkbox"/> Clear (no clouds, no precipitation) <input type="checkbox"/> Cloudy (partially cloudy, no precipitation) <input type="checkbox"/> Overcast (full cloud cover, no precipitation) <input type="checkbox"/> Precipitating <input type="checkbox"/> Unknown
What was the type of precipitation?	<input checked="" type="checkbox"/> No precipitation <input type="checkbox"/> Unknown <input type="checkbox"/> Raining <input type="checkbox"/> Freezing rain <input type="checkbox"/> Sleet <input type="checkbox"/> Snowing <input type="checkbox"/> Hailing
What was the condition of the road surface?	<input checked="" type="checkbox"/> Dry <input type="checkbox"/> Wet <input type="checkbox"/> Snowy, slushy <input type="checkbox"/> Icy <input type="checkbox"/> Other (e.g., sand, dirt, oil on surface, etc.) <input type="checkbox"/> Unknown
How would you describe the amount of traffic at the time of the crash?	<input type="checkbox"/> Heavy <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Light <input type="checkbox"/> No other traffic present
What is your occupation?	<input type="checkbox"/> Professional <input type="checkbox"/> Technical <input type="checkbox"/> Government official <input type="checkbox"/> Management <input type="checkbox"/> Proprietors <input type="checkbox"/> Sales <input type="checkbox"/> Clerical <input type="checkbox"/> Craftsman and foreman <input type="checkbox"/> Service worker <input type="checkbox"/> Student <input type="checkbox"/> Farmers and farm-managers <input type="checkbox"/> Farm labors and foreman <input type="checkbox"/> Private household worker <input type="checkbox"/> Housewife <input type="checkbox"/> Other: <u>interior Decorator</u>
How long have you driven this vehicle?	Years: <u>2</u> Months: <u>8</u> <u>Aug 93'</u>
How many miles do you think that you have driven it in the last 12-month period?	Miles: <u>3/4 of total ÷ 2 yrs 8mo</u>
How often do you drive this particular roadway?	<input type="checkbox"/> Daily <input checked="" type="checkbox"/> Twice weekly <u>3X</u> <input type="checkbox"/> Once weekly <input type="checkbox"/> Twice monthly <input type="checkbox"/> Once monthly <input type="checkbox"/> Very infrequently <input type="checkbox"/> First time on road
Where were you coming from just prior to the crash?	<input checked="" type="checkbox"/> Home <input type="checkbox"/> Work <input type="checkbox"/> School <input type="checkbox"/> Shopping <input type="checkbox"/> Social/recreational <input type="checkbox"/> Restaurant <input type="checkbox"/> Personal business <input type="checkbox"/> Other: _____
Where were you intending to go when the crash occurred?	<input type="checkbox"/> Home <input type="checkbox"/> Work <input type="checkbox"/> School <input type="checkbox"/> Shopping <input type="checkbox"/> Social/recreational <input type="checkbox"/> Restaurant <input checked="" type="checkbox"/> Personal business <input type="checkbox"/> Other: <u>PAYING Light Bill</u>

## OCCUPANT DATA QUESTIONS

HOW MANY PEOPLE WERE IN THE VEHICLE AT THE TIME OF THE CRASH?

	DRIVER	OCCUPANT # 2	OCCUPANT # 3
<b>SEATING POSITION?</b> Front Left (FL)      Second Left (2L) Front Middle (FM)      Second Middle (2M) Front Right (FR)      Second Right (2R)  Third Left (3L)      Other (SPECIFY in block) Third Middle (3M) Third Right (3R)	FRONT LEFT	FR	2L
<b>SEX, HEIGHT, WEIGHT, AND AGE?</b>  <b>CIRCLE DRIVER'S RACE:</b> White      Black <u>American Indian</u> 167.6 Eskimo or Aleut      Asian or Pacific Islander      62.0  Other (specify): Unknown	<input type="checkbox"/> M <input checked="" type="checkbox"/> F - Not pregnant <input type="checkbox"/> F - Pregnant - # of months _____ <input type="checkbox"/> F - Unk. if pregnant  HEIGHT: <u>5'6"</u> WEIGHT: <u>150</u> AGE: <u>24</u>  DRIVER OF HISPANIC ORIGIN? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> U	<input type="checkbox"/> M <input checked="" type="checkbox"/> F - Not pregnant <input type="checkbox"/> F - Pregnant - # of months _____ <input type="checkbox"/> F - Unk. if pregnant  HEIGHT: <u>4'7 1/2"</u> WEIGHT: <u>152</u> AGE: <u>4</u>  	<input type="checkbox"/> M <input checked="" type="checkbox"/> F - Not pregnant <input type="checkbox"/> F - Pregnant - # of months _____ <input type="checkbox"/> F - Unk. if pregnant  HEIGHT: <u>3'7"</u> 94.0 WEIGHT: <u>27</u> 12.2 AGE: <u>2</u>  
<b>OCCUPANT POSTURE</b>  A) Kneeling or standing on seat B) Lying on or across seat C) Kneeling, standing or sitting in front of seat D) Sitting sideways, turned to side or back E) Sitting on console F) Lying back in reclined position G) Other (specify) H) Unknown	<input type="checkbox"/> Leaning to left <input type="checkbox"/> Leaning to right <input checked="" type="checkbox"/> Sitting upright <input type="checkbox"/> Unknown  Indicate all letters that apply and describe if other than above	<input type="checkbox"/> Leaning to left <input type="checkbox"/> Leaning to right <input checked="" type="checkbox"/> Sitting upright <input type="checkbox"/> Unknown  Indicate all letters that apply and describe if other than above	<input type="checkbox"/> Leaning to left <input type="checkbox"/> Leaning to right <input checked="" type="checkbox"/> Sitting upright <input type="checkbox"/> Unknown  Indicate all letters that apply and describe if other than above
<b>FEET AND HANDS/ARMS LOCATION JUST PRIOR TO IMPACT</b>  <b>FEET</b> A) On floor or foot controls B) One or both on dash C) One or both on seat D) Other (specify) E) Unknown  <b>HANDS / ARMS</b> F) Both hands on steering wheel G) One on wheel, other hand resting or adjusting a control (specify hand on wheel and control involved) H) Dialing a cellular phone (specify location and type of phone) I) Holding a cellular phone (specify location and type of phone) J) Bracing with one or both hands K) On lap L) One or both out of window (specify) M) Other (specify) N) Unknown	Indicate all letters that apply and further describe as needed  (A)  (F)	Indicate all letters that apply and further describe as needed  HANGING OVER seat  ON LAP holding POKET BOOK	Indicate all letters that apply and further describe as needed  → D, H  Holding/eating box of popcorn

OCCUPANT DATA CONTINUED ON NEXT PAGE

**OCCUPANT DATA QUESTIONS (continued)**

	DRIVER	OCCUPANT # <u>2</u>	OCCUPANT # <u>3</u>																																																
<b>BACK UP AGAINST THE SEAT BACK?</b>	<input type="checkbox"/> No (describe) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No (describe) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No (describe) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown																																																
<b>ADJUSTABLE SEAT TRACK, IF "YES" WHERE WAS THE TRACK PRIOR TO IMPACT?</b>	<input type="checkbox"/> Not adjustable <input type="checkbox"/> Seat all the way forward <input type="checkbox"/> Between forward and middle <input checked="" type="checkbox"/> At middle position <input type="checkbox"/> Between middle and rear position <input type="checkbox"/> Seat all the way rearward <input type="checkbox"/> Unknown	<input type="checkbox"/> Not adjustable <input type="checkbox"/> Seat all the way forward <input type="checkbox"/> Between forward and middle <input checked="" type="checkbox"/> At middle position <input type="checkbox"/> Between middle and rear position <input type="checkbox"/> Seat all the way rearward <input type="checkbox"/> Unknown	<input checked="" type="checkbox"/> Not adjustable <input type="checkbox"/> Seat all the way forward <input type="checkbox"/> Between forward and middle <input type="checkbox"/> At middle position <input type="checkbox"/> Between middle and rear position <input type="checkbox"/> Seat all the way rearward <input type="checkbox"/> Unknown																																																
<b>ADJUSTABLE SEAT BACK, IF "YES" WHERE WAS THE BACK PRE AND POST IMPACT</b>	<table border="0"> <tr> <td><u>PRE</u></td> <td><u>POST</u></td> </tr> <tr> <td><input type="checkbox"/> Not adjustable</td> <td><input type="checkbox"/> Not adjustable</td> </tr> <tr> <td><input checked="" type="checkbox"/> Completely upright</td> <td><input checked="" type="checkbox"/> Completely upright</td> </tr> <tr> <td><input type="checkbox"/> Slightly reclined</td> <td><input type="checkbox"/> Slightly reclined</td> </tr> <tr> <td><input type="checkbox"/> Completely reclined</td> <td><input type="checkbox"/> Completely reclined</td> </tr> <tr> <td><input type="checkbox"/> Slightly forward of upright</td> <td><input type="checkbox"/> Slightly forward of upright</td> </tr> <tr> <td><input type="checkbox"/> Completely forward</td> <td><input type="checkbox"/> Completely forward</td> </tr> <tr> <td><input type="checkbox"/> Unknown</td> <td><input type="checkbox"/> Unknown</td> </tr> </table>	<u>PRE</u>	<u>POST</u>	<input type="checkbox"/> Not adjustable	<input type="checkbox"/> Not adjustable	<input checked="" type="checkbox"/> Completely upright	<input checked="" type="checkbox"/> Completely upright	<input type="checkbox"/> Slightly reclined	<input type="checkbox"/> Slightly reclined	<input type="checkbox"/> Completely reclined	<input type="checkbox"/> Completely reclined	<input type="checkbox"/> Slightly forward of upright	<input type="checkbox"/> Slightly forward of upright	<input type="checkbox"/> Completely forward	<input type="checkbox"/> Completely forward	<input type="checkbox"/> Unknown	<input type="checkbox"/> Unknown	<table border="0"> <tr> <td><u>PRE</u></td> <td><u>POST</u></td> </tr> <tr> <td><input type="checkbox"/> Not adjustable</td> <td><input type="checkbox"/> Not adjustable</td> </tr> <tr> <td><input checked="" type="checkbox"/> Completely upright</td> <td><input checked="" type="checkbox"/> Completely upright</td> </tr> <tr> <td><input type="checkbox"/> Slightly reclined</td> <td><input type="checkbox"/> Slightly reclined</td> </tr> <tr> <td><input type="checkbox"/> Completely reclined</td> <td><input type="checkbox"/> Completely reclined</td> </tr> <tr> <td><input type="checkbox"/> Slightly forward of upright</td> <td><input type="checkbox"/> Slightly forward of upright</td> </tr> <tr> <td><input type="checkbox"/> Completely forward</td> <td><input type="checkbox"/> Completely forward</td> </tr> <tr> <td><input type="checkbox"/> Unknown</td> <td><input type="checkbox"/> Unknown</td> </tr> </table>	<u>PRE</u>	<u>POST</u>	<input type="checkbox"/> Not adjustable	<input type="checkbox"/> Not adjustable	<input checked="" type="checkbox"/> Completely upright	<input checked="" type="checkbox"/> Completely upright	<input type="checkbox"/> Slightly reclined	<input type="checkbox"/> Slightly reclined	<input type="checkbox"/> Completely reclined	<input type="checkbox"/> Completely reclined	<input type="checkbox"/> Slightly forward of upright	<input type="checkbox"/> Slightly forward of upright	<input type="checkbox"/> Completely forward	<input type="checkbox"/> Completely forward	<input type="checkbox"/> Unknown	<input type="checkbox"/> Unknown	<table border="0"> <tr> <td><u>PRE</u></td> <td><u>POST</u></td> </tr> <tr> <td><input checked="" type="checkbox"/> Not adjustable</td> <td><input type="checkbox"/> Not adjustable</td> </tr> <tr> <td><input type="checkbox"/> Completely upright</td> <td><input type="checkbox"/> Completely upright</td> </tr> <tr> <td><input type="checkbox"/> Slightly reclined</td> <td><input type="checkbox"/> Slightly reclined</td> </tr> <tr> <td><input type="checkbox"/> Completely reclined</td> <td><input type="checkbox"/> Completely reclined</td> </tr> <tr> <td><input type="checkbox"/> Slightly forward of upright</td> <td><input type="checkbox"/> Slightly forward of upright</td> </tr> <tr> <td><input type="checkbox"/> Completely forward</td> <td><input type="checkbox"/> Completely forward</td> </tr> <tr> <td><input type="checkbox"/> Unknown</td> <td><input type="checkbox"/> Unknown</td> </tr> </table>	<u>PRE</u>	<u>POST</u>	<input checked="" type="checkbox"/> Not adjustable	<input type="checkbox"/> Not adjustable	<input type="checkbox"/> Completely upright	<input type="checkbox"/> Completely upright	<input type="checkbox"/> Slightly reclined	<input type="checkbox"/> Slightly reclined	<input type="checkbox"/> Completely reclined	<input type="checkbox"/> Completely reclined	<input type="checkbox"/> Slightly forward of upright	<input type="checkbox"/> Slightly forward of upright	<input type="checkbox"/> Completely forward	<input type="checkbox"/> Completely forward	<input type="checkbox"/> Unknown	<input type="checkbox"/> Unknown
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<input type="checkbox"/> Completely forward	<input type="checkbox"/> Completely forward																																																		
<input type="checkbox"/> Unknown	<input type="checkbox"/> Unknown																																																		

**TILT STEERING COLUMN ADJUSTMENT PRIOR TO IMPACT**

<input type="checkbox"/> Not adjustable	<input type="checkbox"/> Full up	<input type="checkbox"/> Between full up and center
<input checked="" type="checkbox"/> Center	<input type="checkbox"/> Between center and full down	
<input type="checkbox"/> Full down	<input type="checkbox"/> Unknown	

**TELESCOPING STEERING COLUMN PRIOR TO IMPACT**

<input checked="" type="checkbox"/> Not adjustable	<input type="checkbox"/> Full back	<input type="checkbox"/> Between full back and midpoint
<input type="checkbox"/> Midpoint	<input type="checkbox"/> Between midpoint and full forward	
<input type="checkbox"/> Full forward	<input type="checkbox"/> Unknown	

**Did this vehicle have a cellular phone in it during the crash?**

- ☒ No  
☐ Yes - describe type: \_\_\_\_\_  
 (e.g., portable, mounted in vehicle, flip phone, etc.)  
☐ Unknown

***(Note to researcher: try to determine any driver distractions without implying fault)***

**Was the driver doing any of the following? (check all that apply - and specify)**

- ☐ Talking to or listening to another occupant (specify):  
☐ Was there a moving object in vehicle (specify):  
☐ Talking or listening on a cellular phone (specify):  
☐ Dialing a cellular phone (specify):  
☐ Adjusting climate control (specify):  
☐ Adjusting radio, CD or cassette player (specify):  
☐ Using other device or object in vehicle (specify):  
☐ Sleepy / asleep (specify):  
☐ Distracted by outside person, object, or event (specify):  
☐ Eating or drinking (specify):  
☐ Smoking related (specify):  
☐ Other (specify):  
☒ Unknown



## RESTRAINT INFORMATION

	DRIVER	OCCUPANT # <u>2</u>	OCCUPANT # <u>3</u>
<b>TYPE OF SEAT BELT AVAILABLE</b>  NOTE: If a belt is not available for a seat position -- describe reason	<input type="checkbox"/> Unknown <input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input checked="" type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Not available * * Describe:	<input type="checkbox"/> Unknown <input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input checked="" type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Not available * * Describe:	<input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Not available * * Describe:
<b>DO BELTS MOVE ALONG A MOTORIZED TRACK FOR THIS SEAT?</b> <i>(i.e., 2-point automatic belt)</i>	<input type="checkbox"/> Unknown <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes *	<input type="checkbox"/> Unknown <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes *	<input type="checkbox"/> Unknown <input type="checkbox"/> No <input type="checkbox"/> Yes *
<b>IF "YES", WERE THEY WORKING PROPERLY?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No (describe)	<input type="checkbox"/> Yes <input type="checkbox"/> No (describe)	<input type="checkbox"/> Yes <input type="checkbox"/> No (describe)
<b>ARE ANY BELTS ATTACHED TO THE DOOR?</b> <i>(i.e., 3-point automatic belt)</i>	<input type="checkbox"/> Unknown <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes *	<input type="checkbox"/> Unknown <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes *	<input type="checkbox"/> Unknown <input type="checkbox"/> No <input type="checkbox"/> Yes *
<b>* IF "YES", DOES IT CROSS:</b>	<input type="checkbox"/> Chest <input type="checkbox"/> Lap <input type="checkbox"/> Both	<input type="checkbox"/> Chest <input type="checkbox"/> Lap <input type="checkbox"/> Both	<input type="checkbox"/> Chest <input type="checkbox"/> Lap <input type="checkbox"/> Both
<b>OCCUPANT WEARING ANY SEATBELT?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> Unknown	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown

## SKIP THE FOLLOWING IF NO SEAT BELT WAS WORN

<b>TYPE OF BELT WORN?</b>	<input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Unknown	<input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Unknown	<input checked="" type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Unknown
<b>LAP BELT SITUATED?</b>	<input type="checkbox"/> Low on lap <input type="checkbox"/> Across stomach <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Low on lap <input type="checkbox"/> Across stomach <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Low on lap <input type="checkbox"/> Across stomach <input type="checkbox"/> Other (specify): <u>ACROSS</u> <u>SHIELD</u> <input type="checkbox"/> Unknown
<b>SHOULDER BELT SITUATED?</b>	<input type="checkbox"/> Over shoulder <input type="checkbox"/> Under the arm <input type="checkbox"/> Behind back <input type="checkbox"/> Behind seat <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Over shoulder <input type="checkbox"/> Under the arm <input type="checkbox"/> Behind back <input type="checkbox"/> Behind seat <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Over shoulder <input type="checkbox"/> Under the arm <input checked="" type="checkbox"/> Behind back <input type="checkbox"/> Behind seat <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown

Describe any breaks, tears, or failures to any of the seat belts:

Both kids in back had shoulder belts behind them since I was in their faces

**EJECTION, ENTRAPMENT, MOBILITY INFORMATION**

	DRIVER	OCCUPANT # <u>2</u>	OCCUPANT # <u>3</u>
<b>ANY PART OF BODY THROWN OUTSIDE THE VEHICLE DURING THE CRASH?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes * <input type="checkbox"/> Unknown  * If "Yes" - what part(s) were ejected, and what area of the vehicle was involved.	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes * <input type="checkbox"/> Unknown  * If "Yes" - what part(s) were ejected, and what area of the vehicle was involved.	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes * <input type="checkbox"/> Unknown  * If "Yes" - what part(s) were ejected, and what area of the vehicle was involved.
<b>ANYONE PINNED IN THE VEHICLE?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes ___ physically pinned ___ jammed doors ___ fire, etc. <input type="checkbox"/> Unknown  Detail any entrapment	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes ___ physically pinned ___ jammed doors ___ fire, etc. <input type="checkbox"/> Unknown  Detail any entrapment	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes ___ physically pinned ___ jammed doors ___ fire, etc. <input type="checkbox"/> Unknown  Detail any entrapment
<b>HOW DID OCCUPANT(S) EXIT THE VEHICLE?</b>	<input type="checkbox"/> Fatal before removed <input type="checkbox"/> Removed while unconscious, or not oriented to time or place <input type="checkbox"/> Removed due to perceived serious injuries <input type="checkbox"/> Exited with some assistance <input checked="" type="checkbox"/> Exited under own power <input type="checkbox"/> Fully ejected <input type="checkbox"/> Unknown	<input type="checkbox"/> Fatal before removed <input checked="" type="checkbox"/> Removed while unconscious, or not oriented to time or place <input type="checkbox"/> Removed due to perceived serious injuries <input type="checkbox"/> Exited with some assistance <input type="checkbox"/> Exited under own power <input type="checkbox"/> Fully ejected <input type="checkbox"/> Unknown	<input type="checkbox"/> Fatal before removed <input type="checkbox"/> Removed while unconscious, or not oriented to time or place <input type="checkbox"/> Removed due to perceived serious injuries <input checked="" type="checkbox"/> Exited with some assistance → <input type="checkbox"/> Exited under own power <input type="checkbox"/> Fully ejected <input type="checkbox"/> Unknown

Further describe any ejection, entrapment, or mobility information here:

**AIR BAG INFORMATION**

WAS THIS VEHICLE EVER EQUIPPED WITH AN AIR BAG?

☒ YES (IF "YES" COMPLETE THIS SECTION)☐ NO ☐ UNKNOWN (IF "NO" OR "UNKNOWN" SKIP THIS SECTION)

	DRIVER SIDE FRONTAL	PASSENGER SIDE FRONTAL OCCUPANT # <u>2</u>	"OTHER" AIR BAG SPECIFY: _____ OCCUPANT # _____
<b>VEHICLE BEEN IN ANY PREVIOUS CRASHES?</b>  <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES - continue to right <input type="checkbox"/> UNKNOWN - go to box below	<input type="checkbox"/> Prior crash <u>without</u> deployment <input type="checkbox"/> One prior crash <u>with</u> deployment <input type="checkbox"/> > 1, <u>with</u> at least one deployment <input type="checkbox"/> Previous accident(s) unknown if deployed  IF PRIOR DEPLOYMENT <input type="checkbox"/> CHECK IF <u>NOT</u> REINSTALLED	<input type="checkbox"/> Prior crash <u>without</u> deployment <input type="checkbox"/> One prior crash <u>with</u> deployment <input type="checkbox"/> > 1, <u>with</u> at least one deployment <input type="checkbox"/> Previous accident(s) unknown if deployed  IF PRIOR DEPLOYMENT <input type="checkbox"/> CHECK IF <u>NOT</u> REINSTALLED	<input type="checkbox"/> Prior crash <u>without</u> deployment <input type="checkbox"/> One prior crash <u>with</u> deployment <input type="checkbox"/> > 1, <u>with</u> at least one deployment <input type="checkbox"/> Previous accident(s) unknown if deployed  IF PRIOR DEPLOYMENT <input type="checkbox"/> CHECK IF <u>NOT</u> REINSTALLED
<b>TYPE OF AIR BAG?</b>	<input checked="" type="checkbox"/> Original equipment <input type="checkbox"/> Retrofitted <input type="checkbox"/> Replacement <input type="checkbox"/> Unknown	<input checked="" type="checkbox"/> Original equipment <input type="checkbox"/> Retrofitted <input type="checkbox"/> Replacement <input type="checkbox"/> Unknown	<input type="checkbox"/> Original equipment <input type="checkbox"/> Retrofitted <input type="checkbox"/> Replacement <input type="checkbox"/> Unknown
<b>PRIOR SERVICE ON THE AIR BAG SYSTEM?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:
<b>DID AIR BAG INFLATE DURING THIS CRASH?</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown <input type="checkbox"/> No  If "NO" was the wiring disconnected prior to the crash?  <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown <input type="checkbox"/> No  If "NO" was the wiring disconnected prior to the crash?  <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	<input type="checkbox"/> Yes <input type="checkbox"/> Unknown <input type="checkbox"/> No  If "NO" was the wiring disconnected prior to the crash?  <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk
<b>WAS THIS PERSON WEARING ANY TYPE OF EYE-WEAR (EYE/ SUNGLASSES OR CONTACT LENSES) ANY JEWELRY, OR HAVE ANY OBJECTS IN MOUTH OR HAND?</b>	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Yes - Specify: <u>SUNGLASSES</u>	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Yes - Specify: <u>SUNGLASSES</u>	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:
<b>WAS THE AIR BAG IN THIS POSITION CONTACTED BY ANOTHER OCCUPANT?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:

Describe any additional information here:

**CHILD SAFETY SEAT INFORMATION**

WAS THERE A PERSON IN A CHILD SAFETY SEAT IN THIS VEHICLE?

☒ YES (IF "YES" COMPLETE THIS SECTION)☐ NO ☐ UNKNOWN (IF "NO" OR "UNKNOWN" SKIP THIS SECTION)

	DRIVER	OCCUPANT # <u>3</u>	OCCUPANT # <u>    </u>
MAKE AND MODEL OF THE SAFETY SEAT?		Bought @ K-mart, its at Grandmas UNK	
TYPE OF SEAT?		<input type="checkbox"/> Infant <input type="checkbox"/> Toddler <input type="checkbox"/> Convertible <input checked="" type="checkbox"/> Booster <input type="checkbox"/> Integral <input type="checkbox"/> Other Specify: _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Infant <input type="checkbox"/> Toddler <input type="checkbox"/> Convertible <input type="checkbox"/> Booster <input type="checkbox"/> Integral <input type="checkbox"/> Other Specify: _____ <input type="checkbox"/> Unknown
DIRECTION FACING PRIOR TO THE CRASH?		<input checked="" type="checkbox"/> Front <input type="checkbox"/> Rearward <input type="checkbox"/> Unknown	<input type="checkbox"/> Front <input type="checkbox"/> Rearward <input type="checkbox"/> Unknown
VEHICLE'S SEAT BELT USED TO HOLD THE SEAT IN PLACE?		<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown
HOW WAS THE VEHICLE'S SEAT BELT SECURED TO THE CHILD SEAT?		<input type="checkbox"/> Looped through designated rear framing studs <input type="checkbox"/> Looped through arm rest slots <input checked="" type="checkbox"/> Belt across safety shield <input type="checkbox"/> Looped through rear frame outside the designated framing struts <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Looped through designated rear framing studs <input type="checkbox"/> Looped through arm rest slots <input type="checkbox"/> Belt across safety shield <input type="checkbox"/> Looped through rear frame outside the designated framing struts <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown
WHAT WAS THE CHILD SEAT EQUIPPED WITH AT TIME OF PURCHASE?		<input type="checkbox"/> Harness <input checked="" type="checkbox"/> Shield <input type="checkbox"/> Tether <input type="checkbox"/> Unknown	<input type="checkbox"/> Harness <input type="checkbox"/> Shield <input type="checkbox"/> Tether <input type="checkbox"/> Unknown
ANY OF THESE ADDED AFTER THEY OWNED THE SAFETY SEAT?		<input type="checkbox"/> Harness <input type="checkbox"/> Shield <input type="checkbox"/> Tether <input checked="" type="checkbox"/> None <input type="checkbox"/> Unknown	<input type="checkbox"/> Harness <input type="checkbox"/> Shield <input type="checkbox"/> Tether <input type="checkbox"/> None <input type="checkbox"/> Unknown

Describe any additional information here:

Torso belt behind them.

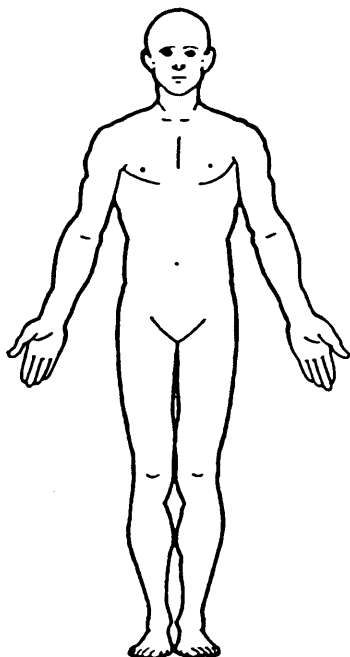
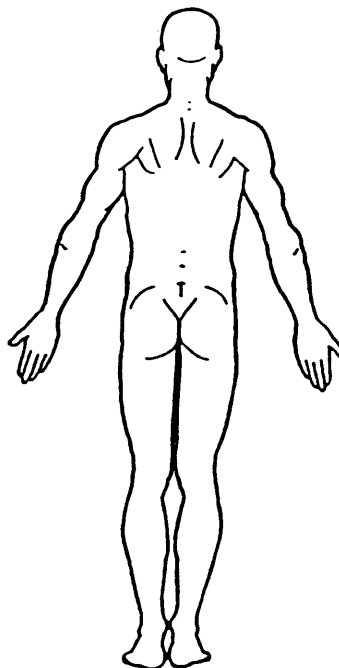


## INJURY INFORMATION

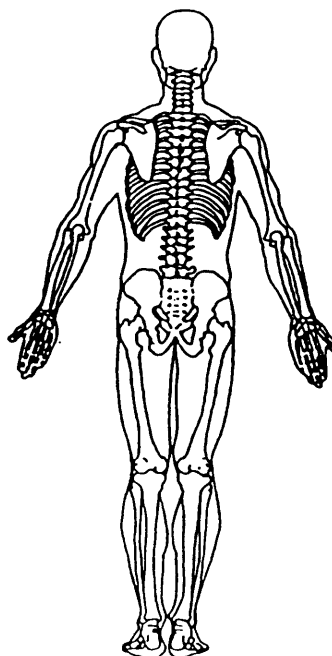
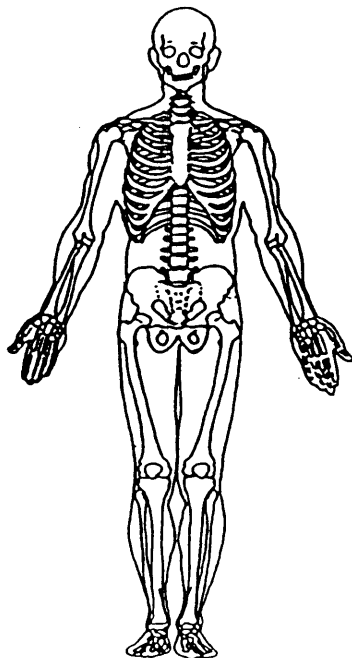
	DRIVER	OCCUPANT # <u>2</u>	OCCUPANT # <u>3</u>
<b>WERE YOU INJURED?</b> ▶ If "YES" go to manikin page and record injuries in detail ▶ If "NO" ask next questions	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown
<b>DID YOU HAVE ANY OF THE FOLLOWING:</b> <i>(If any injuries are checked, go to the manikin page and record location, lesion, and source)</i>	<input type="checkbox"/> Cuts <input type="checkbox"/> Abrasions <input type="checkbox"/> Bruises <input type="checkbox"/> Broken bones <input type="checkbox"/> Head, skull, brain <input type="checkbox"/> Internal injury <input checked="" type="checkbox"/> Sprains, strains <input type="checkbox"/> Other - specify on manikin	<input type="checkbox"/> Cuts <input checked="" type="checkbox"/> Abrasions <input type="checkbox"/> Bruises <input type="checkbox"/> Broken bones <input checked="" type="checkbox"/> Head, skull, brain <input type="checkbox"/> Internal injury <input type="checkbox"/> Sprains, strains <input type="checkbox"/> Other - specify on manikin	<input type="checkbox"/> Cuts <input type="checkbox"/> Abrasions <input type="checkbox"/> Bruises <input type="checkbox"/> Broken bones <input type="checkbox"/> Head, skull, brain <input type="checkbox"/> Internal injury <input type="checkbox"/> Sprains, strains <input type="checkbox"/> Other - specify on manikin
<b>TRANSPORTED DIRECTLY FROM ACCIDENT SCENE FOR TREATMENT?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown
<b>RECEIVE ANY MEDICAL TREATMENT?</b> (check all that apply)	<input type="checkbox"/> Hospital <input type="checkbox"/> Medical clinic <input type="checkbox"/> Paramedics at scene <input checked="" type="checkbox"/> Doctor's office <input type="checkbox"/> Treated by self <input type="checkbox"/> Unknown	<input checked="" type="checkbox"/> Hospital <input type="checkbox"/> Medical clinic <input type="checkbox"/> Paramedics at scene <input type="checkbox"/> Doctor's office <input type="checkbox"/> Treated by self <input type="checkbox"/> Unknown	<input type="checkbox"/> Hospital <input type="checkbox"/> Medical clinic <input type="checkbox"/> Paramedics at scene <input type="checkbox"/> Doctor's office <input type="checkbox"/> Treated by self <input type="checkbox"/> Unknown
<b>HOSPITALIZED?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes - # of days _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes - # of days <u>1</u> <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes - # of days _____ <input type="checkbox"/> Unknown
<b>TREATED AND RELEASED FROM THE EMERGENCY ROOM?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown
<b>NAME OF MEDICAL TREATMENT FACILITY?</b>	Doctors office	[REDACTED] then [REDACTED]	
<b>RECEIVE ANY FOLLOW-UP TREATMENT?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes - describe any additional injuries diagnosed: _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes - describe any additional injuries diagnosed: _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes - describe any additional injuries diagnosed: _____ <input type="checkbox"/> Unknown
<b>LOST ANY DAYS FROM WORK OR SCHOOL (COLLEGE) DUE TO THE CRASH?</b>	<input type="checkbox"/> No <input type="checkbox"/> Not working prior to crash <input checked="" type="checkbox"/> Yes - # of days <u>45</u> since ACCID <input type="checkbox"/> Unknown	<input checked="" type="checkbox"/> No <input type="checkbox"/> Not working prior to crash <input type="checkbox"/> Yes - # of days _____ <input type="checkbox"/> Unknown	<input checked="" type="checkbox"/> No <input type="checkbox"/> Not working prior to crash <input type="checkbox"/> Yes - # of days _____ <input type="checkbox"/> Unknown
<b>IF REQUIRED:</b> <b>WILL YOU SIGN A MEDICAL RELEASE?</b> * If not an in-person interview, make appointment to have release signed	<input type="checkbox"/> No <input type="checkbox"/> Yes* <input checked="" type="checkbox"/> Unknown DATE: _____ TIME: _____ PLACE: _____	<input type="checkbox"/> No <input type="checkbox"/> Yes* <input type="checkbox"/> Unknown DATE: _____ TIME: _____ PLACE: _____	<input type="checkbox"/> No <input type="checkbox"/> Yes* <input type="checkbox"/> Unknown DATE: _____ TIME: _____ PLACE: _____

PSU Number 10Case Number—Stratum 9612Vehicle Number 01Occupant Number 01**INJURY DATA FROM INTERVIEWEE(S)**Indicate the *Location, Lesion, Detail, and Source* of all injuries. Specify interviewee(s): DRIVER

## SOFT TISSUE/INTERNAL INJURIES

NECK  
Really  
SORE

## SKELETAL INJURIES



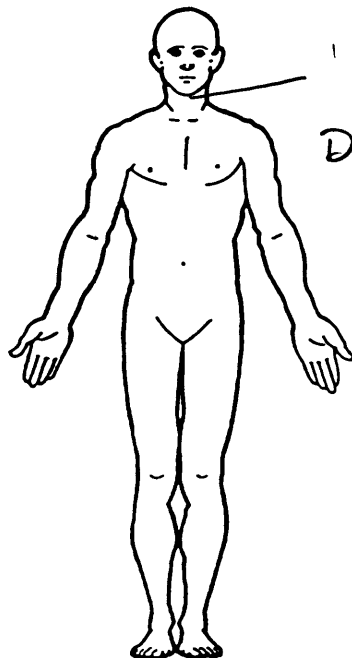
The space provided on the back of this page may be used to further detail injuries noted by the interviewee(s).

PSU Number 10Case Number-Stratum 9612Vehicle Number 61Occupant Number 02

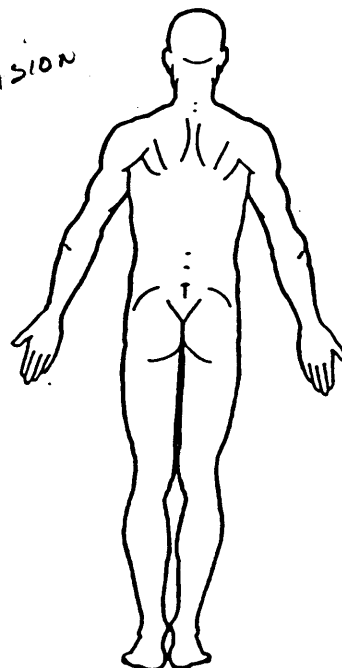
## INJURY DATA FROM INTERVIEWEE(S)

Indicate the *Location, Lesion, Detail, and Source* of all injuries. Specify interviewee(s): DRIVER

## SOFT TISSUE/INTERNAL INJURIES

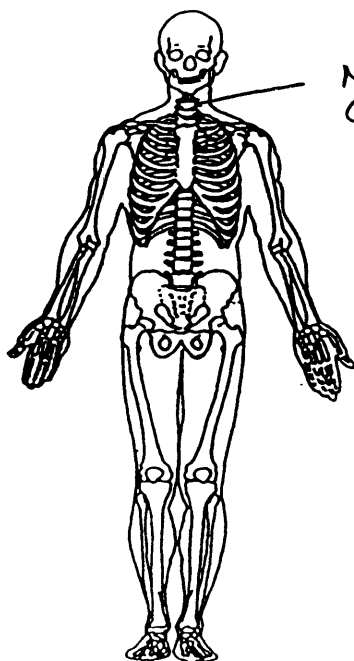


under  
ner chin  
Deep Red Abrasion  
AIR BAG

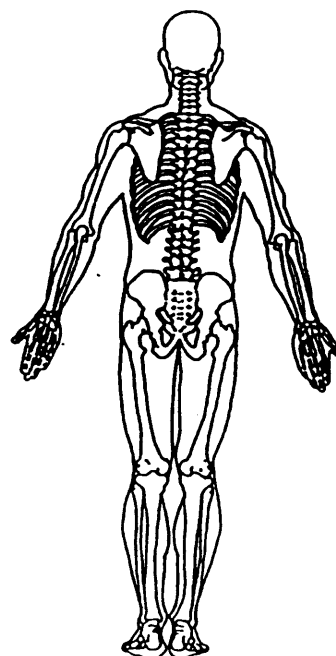


Given  
Blood

## SKELETAL INJURIES



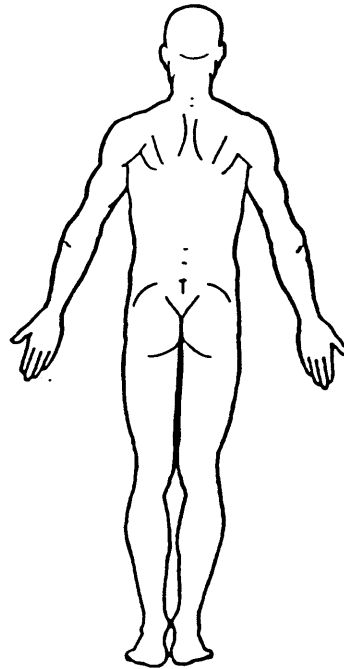
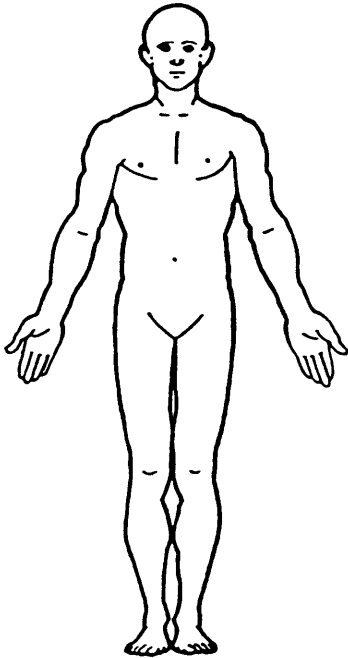
neck  
completely  
Fx  
SPINAL  
CORD  
cut



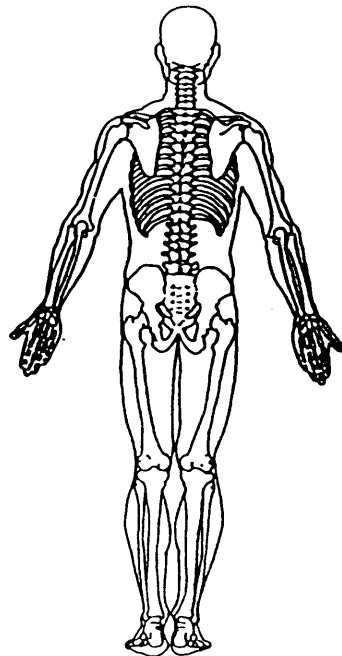
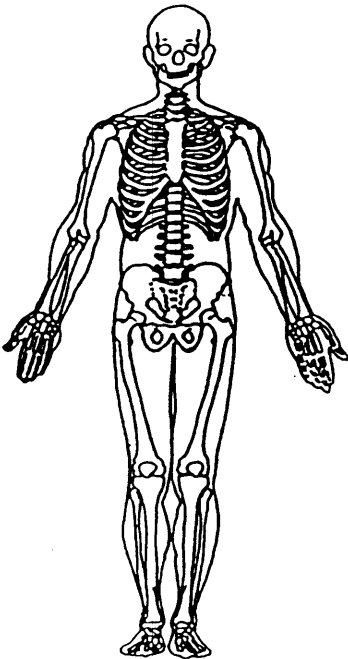
The space provided on the back of this page may be used to further detail injuries noted by the interviewee(s).

PSU Number 10Case Number—Stratum 9612Vehicle Number 01Occupant Number 03**INJURY DATA FROM INTERVIEWEE(S)**Indicate the *Location, Lesion, Detail, and Source* of all injuries. Specify interviewee(s): DRIVER

## SOFT TISSUE/INTERNAL INJURIES



## SKELETAL INJURIES



The space provided on the back of this page may be used to further detail injuries noted by the interviewee(s).





## OCCUPANT DATA QUESTIONS SUPPLEMENT FORM

1. Primary Sampling Unit Number 10  
2. Case Number - Stratum 9612  
3. Vehicle Number 01

Interviewee(s) Role or Name(s): DRIVER  
\_\_\_\_\_  
Phone number: \_\_\_\_\_

### OCCUPANT DATA QUESTIONS

	OCCUPANT # <u>4</u>	OCCUPANT # _____	OCCUPANT # _____
<b>SEATING POSITION?</b> Front Left (FL)      Second Left (2L) Front Middle (FM)      Second Middle (2M) Front Right (FR)      Second Right (2R)  Third Left (3L)      Other (SPECIFY in block) Third Middle (3M) Third Right (3R)	<u>2m</u>		
<b>SEX, HEIGHT, WEIGHT, AND AGE?</b>  <u>99.1</u> <u>15.9</u>	<input checked="" type="checkbox"/> M [ ] F - Not pregnant [ ] F - Pregnant - # of months _____ [ ] F - Unk. if pregnant  HEIGHT: <u>39</u> WEIGHT: <u>35</u> AGE: <u>3</u>	[ ] M [ ] F - Not pregnant [ ] F - Pregnant - # of months _____ [ ] F - Unk. if pregnant  HEIGHT: _____ WEIGHT: _____ AGE: _____	[ ] M [ ] F - Not pregnant [ ] F - Pregnant - # of months _____ [ ] F - nk. if pregnant  HEIGHT: _____ WEIGHT: _____ AGE: _____
<b>OCCUPANT POSTURE</b> A) Kneeling or standing on seat B) Lying on or across seat C) Kneeling, standing or sitting in front of seat D) Sitting sideways, turned to side or back E) Sitting on console F) Lying back in reclined position G) Other (specify) H) Unknown	[ ] Leaning to left [ ] Leaning to right <input checked="" type="checkbox"/> Sitting upright [ ] Unknown  Indicate all letters that apply and describe if other than above	[ ] Leaning to left [ ] Leaning to right [ ] Sitting upright [ ] Unknown  Indicate all letters that apply and describe if other than above	[ ] Leaning to left [ ] Leaning to right [ ] Sitting upright [ ] Unknown  Indicate all letters that apply and describe if other than above

Describe any additional information here:

**OCCUPANT DATA QUESTIONS (continued)**

	OCCUPANT # <u>4</u>	OCCUPANT # <u>    </u>	OCCUPANT # <u>    </u>
<b>FEET AND HANDS/ARMS LOCATION JUST PRIOR TO IMPACT</b>  <u>FEET</u> A) On floor or foot controls B) One or both on dash C) One or both on seat D) Other (specify) E) Unknown  <u>HANDS / ARMS</u> F) Both hands on steering wheel G) One on wheel, other hand resting or adjusting a control (specify hand on wheel and control involved) H) Dialing a cellular phone (specify location and type of phone) I) Holding a cellular phone (specify location and type of phone) J) Bracing with one or both hands K) On lap L) One or both out of window (specify) M) Other (specify) N) Unknown	Indicate all letters that apply and further describe as needed  <i>Feet hanging over booster</i>           <i>K</i>	Indicate all letters that apply and further describe as needed	Indicate all letters that apply and further describe as needed
<b>BACK UP AGAINST THE SEAT BACK?</b>	<input type="checkbox"/> No (describe) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No (describe) <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No (describe) <input type="checkbox"/> Yes <input type="checkbox"/> Unknown
<b>ADJUSTABLE SEAT <u>TRACK</u>. IF "YES" WHERE WAS THE TRACK PRIOR TO IMPACT?</b>	<input checked="" type="checkbox"/> Not adjustable <input type="checkbox"/> Seat all the way forward <input type="checkbox"/> Between forward and middle <input type="checkbox"/> At middle position <input type="checkbox"/> Between middle and rear position <input type="checkbox"/> Seat all the way rearward <input type="checkbox"/> Unknown	<input type="checkbox"/> Not adjustable <input type="checkbox"/> Seat all the way forward <input type="checkbox"/> Between forward and middle <input type="checkbox"/> At middle position <input type="checkbox"/> Between middle and rear position <input type="checkbox"/> Seat all the way rearward <input type="checkbox"/> Unknown	<input type="checkbox"/> Not adjustable <input type="checkbox"/> Seat all the way forward <input type="checkbox"/> Between forward and middle <input type="checkbox"/> At middle position <input type="checkbox"/> Between middle and rear position <input type="checkbox"/> Seat all the way rearward <input type="checkbox"/> Unknown
<b>ADJUSTABLE SEAT <u>BACK</u>. IF "YES" WHERE WAS THE <u>BACK</u> PRE AND POST IMPACT</b>	<u>PRE</u> <u>POST</u> <input type="checkbox"/> <input type="checkbox"/> Not adjustable <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Completely upright <input type="checkbox"/> <input type="checkbox"/> Slightly reclined <input type="checkbox"/> <input type="checkbox"/> Completely reclined <input type="checkbox"/> <input type="checkbox"/> Slightly forward of upright <input type="checkbox"/> <input type="checkbox"/> Completely forward <input type="checkbox"/> <input type="checkbox"/> Unknown	<u>PRE</u> <u>POST</u> <input type="checkbox"/> <input type="checkbox"/> Not adjustable <input type="checkbox"/> <input type="checkbox"/> Completely upright <input type="checkbox"/> <input type="checkbox"/> Slightly reclined <input type="checkbox"/> <input type="checkbox"/> Completely reclined <input type="checkbox"/> <input type="checkbox"/> Slightly forward of upright <input type="checkbox"/> <input type="checkbox"/> Completely forward <input type="checkbox"/> <input type="checkbox"/> Unknown	<u>PRE</u> <u>POST</u> <input type="checkbox"/> <input type="checkbox"/> Not adjustable <input type="checkbox"/> <input type="checkbox"/> Completely upright <input type="checkbox"/> <input type="checkbox"/> Slightly reclined <input type="checkbox"/> <input type="checkbox"/> Completely reclined <input type="checkbox"/> <input type="checkbox"/> Slightly forward of upright <input type="checkbox"/> <input type="checkbox"/> Completely forward <input type="checkbox"/> <input type="checkbox"/> Unknown

RESTRAINT INFORMATION			
	OCCUPANT # <u>4</u>	OCCUPANT # <u>    </u>	OCCUPANT # <u>    </u>
<b>TYPE OF SEAT BELT AVAILABLE</b>  NOTE: If a belt is not available for a seat position -- describe reason	<input type="checkbox"/> Unknown <input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input checked="" type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Not available * * Describe:	<input type="checkbox"/> Unknown <input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Not available * * Describe:	<input type="checkbox"/> Unknown <input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Not available * * Describe:
<b>DO BELTS MOVE ALONG A MOTORIZED TRACK FOR THIS SEAT?</b> (i.e., 2 - point automatic belt)	<input type="checkbox"/> Unknown <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes *	<input type="checkbox"/> Unknown <input type="checkbox"/> No <input type="checkbox"/> Yes *	<input type="checkbox"/> Unknown <input type="checkbox"/> No <input type="checkbox"/> Yes *
<b>* IF "YES", WERE THEY WORKING PROPERLY?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No (describe):	<input type="checkbox"/> Yes <input type="checkbox"/> No (describe):	<input type="checkbox"/> Yes <input type="checkbox"/> No (describe):
<b>DO ANY OF THE BELTS ATTACH TO THE DOOR?</b> (i.e., 3 - point automatic belt)	<input type="checkbox"/> Unknown <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes *	<input type="checkbox"/> Unknown <input type="checkbox"/> No <input type="checkbox"/> Yes *	<input type="checkbox"/> Unknown <input type="checkbox"/> No <input type="checkbox"/> Yes *
<b>* IF "YES", DOES IT CROSS:</b>	<input type="checkbox"/> Chest <input type="checkbox"/> Lap <input type="checkbox"/> Both	<input type="checkbox"/> Chest <input type="checkbox"/> Lap <input type="checkbox"/> Both	<input type="checkbox"/> Chest <input type="checkbox"/> Lap <input type="checkbox"/> Both
<b>OCCUPANT WEARING ANY SEATBELT?</b>	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown
<b>SKIP THE FOLLOWING IF NO SEAT BELT WAS WORN</b>			
<b>TYPE OF BELT WORN?</b>	<input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input checked="" type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Unknown	<input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Unknown	<input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Unknown
<b>LAP BELT SITUATED?</b>	<input type="checkbox"/> Low on lap <input type="checkbox"/> Across stomach <input checked="" type="checkbox"/> Other (specify): <u>Across shield of booster</u> <input type="checkbox"/> Unknown	<input type="checkbox"/> Low on lap <input type="checkbox"/> Across stomach <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Low on lap <input type="checkbox"/> Across stomach <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown
<b>SHOULDER BELT SITUATED?</b>	<input type="checkbox"/> Over shoulder <input type="checkbox"/> Under the arm <input checked="" type="checkbox"/> Behind back <input type="checkbox"/> Behind seat <input type="checkbox"/> Other (specify): _____	<input type="checkbox"/> Over shoulder <input type="checkbox"/> Under the arm <input type="checkbox"/> Behind back <input type="checkbox"/> Behind seat <input type="checkbox"/> Other (specify): _____	<input type="checkbox"/> Over shoulder <input type="checkbox"/> Under the arm <input type="checkbox"/> Behind back <input type="checkbox"/> Behind seat <input type="checkbox"/> Other (specify): _____
Describe any breaks, tears, or failures to any of the seat belts:			

**EJECTION, ENTRAPMENT, MOBILITY INFORMATION**

	OCCUPANT # <u>4</u>	OCCUPANT # <u>    </u>	OCCUPANT # <u>    </u>
<b>ANY PART OF BODY THROWN OUTSIDE THE VEHICLE DURING THE CRASH?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes * <input type="checkbox"/> Unknown  * If "Yes" - what part(s) were ejected, and what area of the vehicle was involved.	<input type="checkbox"/> No <input type="checkbox"/> Yes * <input type="checkbox"/> Unknown  * If "Yes" - what part(s) were ejected, and what area of the vehicle was involved.	<input type="checkbox"/> No <input type="checkbox"/> Yes * <input type="checkbox"/> Unknown  * If "Yes" - what part(s) were ejected, and what area of the vehicle was involved.
<b>ANYONE PINNED IN THE VEHICLE?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes ___ physically pinned ___ jammed doors ___ fire, etc.  <input type="checkbox"/> Unknown Detail any entrapment	<input type="checkbox"/> No <input type="checkbox"/> Yes ___ physically pinned ___ jammed doors ___ fire, etc.  <input type="checkbox"/> Unknown Detail any entrapment	<input type="checkbox"/> No <input type="checkbox"/> Yes ___ physically pinned ___ jammed doors ___ fire, etc.  <input type="checkbox"/> Unknown Detail any entrapment
<b>HOW DID OCCUPANT(S) EXIT THE VEHICLE?</b>	<input type="checkbox"/> Fatal before removed <input type="checkbox"/> Removed while unconscious, or not oriented to time or place <input type="checkbox"/> Removed due to perceived serious injuries <input checked="" type="checkbox"/> Exited with some assistance <input type="checkbox"/> Exited under own power <input type="checkbox"/> Fully ejected <input type="checkbox"/> Unknown	<input type="checkbox"/> Fatal before removed <input type="checkbox"/> Removed while unconscious, or not oriented to time or place <input type="checkbox"/> Removed due to perceived serious injuries <input type="checkbox"/> Exited with some assistance <input type="checkbox"/> Exited under own power <input type="checkbox"/> Fully ejected <input type="checkbox"/> Unknown	<input type="checkbox"/> Fatal before removed <input type="checkbox"/> Removed while unconscious, or not oriented to time or place <input type="checkbox"/> Removed due to perceived serious injuries <input type="checkbox"/> Exited with some assistance <input type="checkbox"/> Exited under own power <input type="checkbox"/> Fully ejected <input type="checkbox"/> Unknown

Further describe any ejection, entrapment, or mobility information here:



**AIR BAG INFORMATION****WAS THIS VEHICLE EVER EQUIPPED WITH AN AIR BAG?**☐ YES (IF "YES" COMPLETE THIS SECTION)☒ NO ☐ UNKNOWN (IF "NO" OR "UNKNOWN" SKIP THIS SECTION)

	OCCUPANT # ____ "OTHER" AIR BAG SPECIFY: _____ _____	OCCUPANT # ____ "OTHER" AIR BAG SPECIFY: _____ _____	OCCUPANT # ____ "OTHER" AIR BAG SPECIFY: _____ _____
<b>VEHICLE BEEN IN ANY PREVIOUS CRASHES?</b>  <input type="checkbox"/> NO <input type="checkbox"/> YES - continue to right <input type="checkbox"/> UNKNOWN - go to box below	<input type="checkbox"/> Prior crash <u>without</u> deployment <input type="checkbox"/> One prior crash <u>with</u> deployment <input type="checkbox"/> > 1, <u>with</u> at least one deployment <input type="checkbox"/> Previous accident(s) unknown if deployed  <b>IF PRIOR DEPLOYMENT</b> <input type="checkbox"/> CHECK IF <u>NOT</u> REINSTALLED	<input type="checkbox"/> Prior crash <u>without</u> deployment <input type="checkbox"/> One prior crash <u>with</u> deployment <input type="checkbox"/> > 1, <u>with</u> at least one deployment <input type="checkbox"/> Previous accident(s) unknown if deployed  <b>IF PRIOR DEPLOYMENT</b> <input type="checkbox"/> CHECK IF <u>NOT</u> REINSTALLED	<input type="checkbox"/> Prior crash <u>without</u> deployment <input type="checkbox"/> One prior crash <u>with</u> deployment <input type="checkbox"/> > 1, <u>with</u> at least one deployment <input type="checkbox"/> Previous accident(s) unknown if deployed  <b>IF PRIOR DEPLOYMENT</b> <input type="checkbox"/> CHECK IF <u>NOT</u> REINSTALLED
<b>TYPE OF AIR BAG?</b>	<input type="checkbox"/> Original equipment <input type="checkbox"/> Retrofitted <input type="checkbox"/> Replacement <input type="checkbox"/> Unknown	<input type="checkbox"/> Original equipment <input type="checkbox"/> Retrofitted <input type="checkbox"/> Replacement <input type="checkbox"/> Unknown	<input type="checkbox"/> Original equipment <input type="checkbox"/> Retrofitted <input type="checkbox"/> Replacement <input type="checkbox"/> Unknown
<b>PRIOR SERVICE ON THE AIR BAG SYSTEM?</b>	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:
<b>DID AIR BAG INFLATE DURING THIS CRASH?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> Unknown <input type="checkbox"/> No  If "NO" was the wiring disconnected prior to the crash?  <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	<input type="checkbox"/> Yes <input type="checkbox"/> Unknown <input type="checkbox"/> No  If "NO" was the wiring disconnected prior to the crash?  <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	<input type="checkbox"/> Yes <input type="checkbox"/> Unknown <input type="checkbox"/> No  If "NO" was the wiring disconnected prior to the crash?  <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk
<b>WAS THIS PERSON WEARING ANY TYPE OF EYE-WEAR (EYE/ SUNGLASSES OR CONTACT LENSES) ANY JEWELRY, OR HAVE ANY OBJECTS IN MOUTH OR HAND?</b>	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:
<b>WAS THE AIR BAG IN THIS POSITION CONTACTED BY ANOTHER OCCUPANT?</b>	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:

Describe any additional information here:

**CHILD SAFETY SEAT INFORMATION**

WAS THERE A PERSON IN A CHILD SAFETY SEAT IN THIS VEHICLE?

☒ YES (IF "YES" COMPLETE THIS SECTION)☐ NO ☐ UNKNOWN (IF "NO" OR "UNKNOWN" SKIP THIS SECTION)

	OCCUPANT # <u>4</u>	OCCUPANT # ____	OCCUPANT # ____
MAKE AND MODEL OF THE SAFETY SEAT?			
TYPE OF SEAT?	<input type="checkbox"/> Infant <input type="checkbox"/> Toddler <input type="checkbox"/> Convertible <input checked="" type="checkbox"/> Booster <input type="checkbox"/> Integral <input type="checkbox"/> Other Specify: _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Infant <input type="checkbox"/> Toddler <input type="checkbox"/> Convertible <input type="checkbox"/> Booster <input type="checkbox"/> Integral <input type="checkbox"/> Other Specify: _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Infant <input type="checkbox"/> Toddler <input type="checkbox"/> Convertible <input type="checkbox"/> Booster <input type="checkbox"/> Integral <input type="checkbox"/> Other Specify: _____ <input type="checkbox"/> Unknown
DIRECTION FACING PRIOR TO THE CRASH?	<input checked="" type="checkbox"/> Front <input type="checkbox"/> Rearward <input type="checkbox"/> Unknown	<input type="checkbox"/> Front <input type="checkbox"/> Rearward <input type="checkbox"/> Unknown	<input type="checkbox"/> Front <input type="checkbox"/> Rearward <input type="checkbox"/> Unknown
VEHICLE'S SEAT BELT USED TO HOLD THE SEAT IN PLACE?	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown
HOW WAS THE VEHICLE'S SEAT BELT SECURED TO THE CHILD SEAT?	<input type="checkbox"/> Looped through designated rear framing studs <input type="checkbox"/> Looped through arm rest slots <input checked="" type="checkbox"/> Belt across safety shield <input type="checkbox"/> Looped through rear frame outside the designated framing struts <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Looped through designated rear framing studs <input type="checkbox"/> Looped through arm rest slots <input type="checkbox"/> Belt across safety shield <input type="checkbox"/> Looped through rear frame outside the designated framing struts <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Looped through designated rear framing studs <input type="checkbox"/> Looped through arm rest slots <input type="checkbox"/> Belt across safety shield <input type="checkbox"/> Looped through rear frame outside the designated framing struts <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown
WHAT WAS THE CHILD SEAT EQUIPPED WITH AT TIME OF PURCHASE?	<input type="checkbox"/> Harness <input checked="" type="checkbox"/> Shield <input type="checkbox"/> Tether <input type="checkbox"/> Unknown	<input type="checkbox"/> Harness <input type="checkbox"/> Shield <input type="checkbox"/> Tether <input type="checkbox"/> Unknown	<input type="checkbox"/> Harness <input type="checkbox"/> Shield <input type="checkbox"/> Tether <input type="checkbox"/> Unknown
ANY OF THESE ADDED AFTER THEY OWNED THE SAFETY SEAT?	<input type="checkbox"/> Harness <input type="checkbox"/> Shield <input type="checkbox"/> Tether <input checked="" type="checkbox"/> None <input type="checkbox"/> Unknown	<input type="checkbox"/> Harness <input type="checkbox"/> Shield <input type="checkbox"/> Tether <input type="checkbox"/> None <input type="checkbox"/> Unknown	<input type="checkbox"/> Harness <input type="checkbox"/> Shield <input type="checkbox"/> Tether <input type="checkbox"/> None <input type="checkbox"/> Unknown

Describe any additional information here:

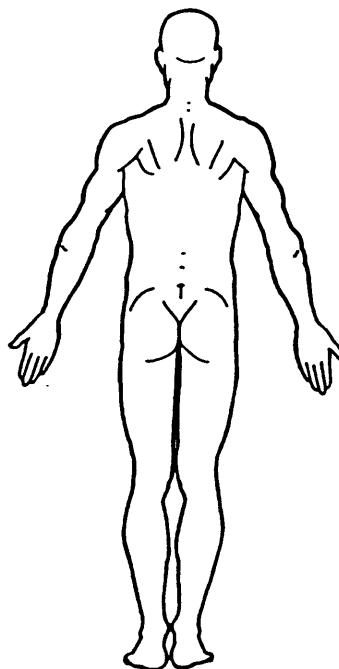
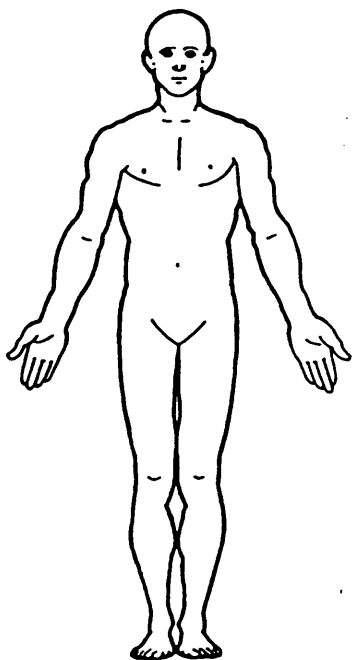
INJURY INFORMATION			
	OCCUPANT # <u>4</u>	OCCUPANT # ____	OCCUPANT # ____
<b>WERE YOU INJURED?</b> <i>• If "YES" go to manikin page and record injuries in detail</i> <i>• If "NO" ask next questions</i>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown
<b>DID YOU HAVE ANY OF THE FOLLOWING:</b> <i>(If any injuries are checked, go to the manikin page and record location, lesion, and source)</i>	<input type="checkbox"/> Cuts <input type="checkbox"/> Abrasions <input type="checkbox"/> Bruises <input type="checkbox"/> Broken bones <input type="checkbox"/> Head, skull, brain <input type="checkbox"/> Internal injury <input type="checkbox"/> Sprains, strains <input type="checkbox"/> Other specify on manikin	<input type="checkbox"/> Cuts <input type="checkbox"/> Abrasions <input type="checkbox"/> Bruises <input type="checkbox"/> Broken bones <input type="checkbox"/> Head, skull, brain <input type="checkbox"/> Internal injury <input type="checkbox"/> Sprains, strains <input type="checkbox"/> Other specify on manikin	<input type="checkbox"/> Cuts <input type="checkbox"/> Abrasions <input type="checkbox"/> Bruises <input type="checkbox"/> Broken bones <input type="checkbox"/> Head, skull, brain <input type="checkbox"/> Internal injury <input type="checkbox"/> Sprains, strains <input type="checkbox"/> Other specify on manikin
<b>TRANSPORTED DIRECTLY FROM ACCIDENT SCENE FOR TREATMENT?</b>	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown
<b>RECEIVE ANY MEDICAL TREATMENT?</b> <i>(check all that apply)</i>	<input type="checkbox"/> Hospital <input type="checkbox"/> Medical clinic <input type="checkbox"/> Paramedics at scene <input type="checkbox"/> Doctor's office <input type="checkbox"/> Treated by self <input type="checkbox"/> Unknown	<input type="checkbox"/> Hospital <input type="checkbox"/> Medical clinic <input type="checkbox"/> Paramedics at scene <input type="checkbox"/> Doctor's office <input type="checkbox"/> Treated by self <input type="checkbox"/> Unknown	<input type="checkbox"/> Hospital <input type="checkbox"/> Medical clinic <input type="checkbox"/> Paramedics at scene <input type="checkbox"/> Doctor's office <input type="checkbox"/> Treated by self <input type="checkbox"/> Unknown
<b>HOSPITALIZED?</b>	<input type="checkbox"/> No <input type="checkbox"/> Yes - # of days ____ <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes - # of days ____ <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes - # of days ____ <input type="checkbox"/> Unknown
<b>TREATED AND RELEASED FROM THE EMERGENCY ROOM?</b>	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown
<b>NAME OF MEDICAL TREATMENT FACILITY?</b>			
<b>RECEIVED ANY FOLLOW-UP TREATMENT?</b>	<input type="checkbox"/> No <input type="checkbox"/> Yes - describe any additional injuries diagnosed: _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes - describe any additional injuries diagnosed: _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes - describe any additional injuries diagnosed: _____ <input type="checkbox"/> Unknown
<b>LOST ANY DAYS FROM WORK OR SCHOOL (COLLEGE) DUE TO THE CRASH?</b>	<input type="checkbox"/> No <input checked="" type="checkbox"/> Not working prior to crash <input type="checkbox"/> Yes - # of days ____ <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Not working prior to crash <input type="checkbox"/> Yes - # of days ____ <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Not working prior to crash <input type="checkbox"/> Yes - # of days ____ <input type="checkbox"/> Unknown
<b>IF REQUIRED: WILL YOU SIGN A MEDICAL RELEASE?</b> <i>* If not an in-person interview, make appointment to have release signed</i>	<input type="checkbox"/> No <input type="checkbox"/> Yes* <input type="checkbox"/> Unknown <b>DATE:</b> _____ <b>TIME:</b> _____ <b>PLACE:</b> _____	<input type="checkbox"/> No <input type="checkbox"/> Yes* <input type="checkbox"/> Unknown <b>DATE:</b> _____ <b>TIME:</b> _____ <b>PLACE:</b> _____	<input type="checkbox"/> No <input type="checkbox"/> Yes* <input type="checkbox"/> Unknown <b>DATE:</b> _____ <b>TIME:</b> _____ <b>PLACE:</b> _____

PSU Number 10 Case Number—Stratum 9612 Vehicle Number 01 Occupant Number 04

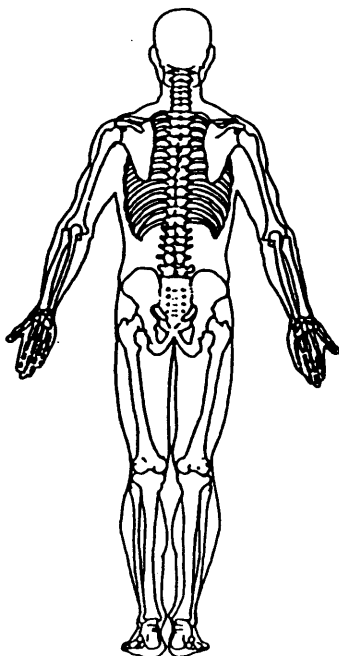
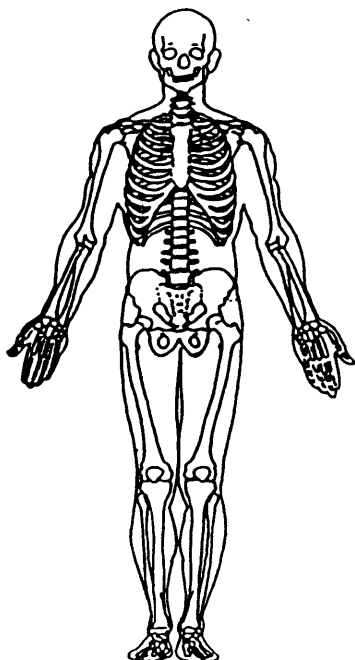
### INJURY DATA FROM INTERVIEWEE(S)

Indicate the *Location, Lesion, Detail, and Source* of all injuries. Specify interviewee(s): Driver  
(Mother)

#### SOFT TISSUE/INTERNAL INJURIES



#### SKELETAL INJURIES



The space provided on the back of this page may be used to further detail injuries noted by the interviewee(s).



**NASS CDS INTERVIEW FORM:**  
**VEHICLE #2 DRIVER**



## INTERVIEW FORM (A)

1. Primary Sampling Unit Number 10 Interviewee(s) Role or Name(s): DRIVER V2  
2. Case Number - Stratum 96 12  
3. Vehicle Number 02 Phone number: \_\_\_\_\_

Review all available information and interview questions prior to conducting interview(s) to ensure the acquisition of all pertinent data.

If the driver was not the person interviewed, was an appointment made for a follow-up interview?

### DRIVER'S DESCRIPTION OF ACCIDENT EVENTS

I was on [redacted] stopped at [redacted]  
pulled into intersection And I got  
hit. thats All I remember

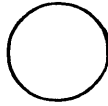
?Q. Do you recall other impacts

After 1st collision I don't remember  
anything

### OCCUPANT'S DESCRIPTION OF ACCIDENT EVENTS

### SPECIFIC QUESTIONS TO ASK INTERVIEWEE

## ACCIDENT DIAGRAM



NORTH

Use this diagram to aid in relating interviewee accident trajectory data (i.e., pre-impact to FRP orientations) to identifiable objects in the environment.

## CRASH DATA INFORMATION

## IF POSSIBLE OBTAIN THIS INFORMATION FROM THE DRIVER:

SOURCE OF INFORMATION:	<input checked="" type="checkbox"/> Driver <input type="checkbox"/> Other occupant <input type="checkbox"/> Relative/friend
TRAVEL DIRECTION?	<input type="checkbox"/> North <input type="checkbox"/> South <input type="checkbox"/> East <input checked="" type="checkbox"/> West (Or where were they coming from or going to?)
LANE?	<input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> Other Note: lane 1 is the right curb lane
ROAD CONDITION?	<input checked="" type="checkbox"/> Dry <input type="checkbox"/> Wet <input type="checkbox"/> Snow <input type="checkbox"/> Slush <input type="checkbox"/> Ice <input type="checkbox"/> Sand, dirt, oil <input type="checkbox"/> Other (specify)
WEATHER CONDITIONS? (Check all that apply)	<input checked="" type="checkbox"/> No adverse conditions <input type="checkbox"/> Rain <input type="checkbox"/> Fog <input type="checkbox"/> Sleet <input type="checkbox"/> Hail <input type="checkbox"/> Snow <input type="checkbox"/> Other (specify)
SIGN OR SIGNAL PRESENT? (check all that apply)	<input type="checkbox"/> Traffic control signal (includes flashing beacons, lane control signals, and green / amber / red signal) <input checked="" type="checkbox"/> Stop sign <input type="checkbox"/> Yield sign <input type="checkbox"/> School zone sign <input type="checkbox"/> Other regulatory sign (No "U" turn, left turn only, wrong way, etc.) specify: _____ <input type="checkbox"/> Warning sign (Winding road sign, stop ahead, intersection signs, etc.) specify: _____ <input type="checkbox"/> Miscellaneous control (including railroad controls) specify: _____ <input type="checkbox"/> None <input type="checkbox"/> Unknown
WAS THE CONTROL FUNCTIONING PROPERLY?	<input type="checkbox"/> No traffic control device present <input type="checkbox"/> Not functioning properly (includes defaced, badly worn, covered with snow, rotated etc.) specify: _____ <input checked="" type="checkbox"/> Functioning properly <input type="checkbox"/> Unknown
SPEED BEFORE THE IMPACT? (in mph)	<input type="checkbox"/> Stopped <input type="checkbox"/> 11-20 <input type="checkbox"/> 31-40 <input type="checkbox"/> 51-60 <input type="checkbox"/> 70+ <input checked="" type="checkbox"/> 1-10 <input type="checkbox"/> 21-30 <input type="checkbox"/> 41-50 <input type="checkbox"/> 61-70 <input type="checkbox"/> Unknown
BEFORE IMPACT, INTENDING TO ... ? (check all that apply)	<input checked="" type="checkbox"/> Go straight <input type="checkbox"/> Stopped <input type="checkbox"/> Turn left <input type="checkbox"/> Turn right <input type="checkbox"/> Slow down <input checked="" type="checkbox"/> Accelerate <input type="checkbox"/> Back up <input type="checkbox"/> Change lanes to right <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Change lanes to left
CONTROL LOSS DUE TO WEATHER OR MECHANICAL PROBLEMS?	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes (describe)
AVOIDANCE ACTIONS?	<input checked="" type="checkbox"/> None <input type="checkbox"/> Braking with lock-up <input type="checkbox"/> Accelerating <input type="checkbox"/> Unknown <input type="checkbox"/> Braking without lock-up <input type="checkbox"/> Steering left <input type="checkbox"/> Other- specify: _____ <input type="checkbox"/> Releasing brakes <input type="checkbox"/> Steering right
LOCATION OF VEHICLE AT TIME OF IMPACT?	<input checked="" type="checkbox"/> Original travel lane <input type="checkbox"/> Different travel lane <input type="checkbox"/> In intersection <input type="checkbox"/> Off roadway to right <input type="checkbox"/> Off roadway to left <input type="checkbox"/> Other (specify): _____
SPEED AT THE TIME OF IMPACT? (in mph)	<input type="checkbox"/> Stopped <input type="checkbox"/> 11-20 <input type="checkbox"/> 31-40 <input type="checkbox"/> 51-60 <input type="checkbox"/> 70+ <input checked="" type="checkbox"/> 1-10 <input type="checkbox"/> 21-30 <input type="checkbox"/> 41-50 <input type="checkbox"/> 61-70 <input type="checkbox"/> Unknown
DESCRIBE ALL THE IMPACTS to the vehicle and how this vehicle moved to its stopped position, after the collision?	Don't Remember Any thing After 1st impact.



**VEHICLE INFORMATION****ROLLOVER DATA**

DID THIS VEHICLE ROLL OVER DURING THE CRASH?

☐ YES -- ASK THE FOLLOWING QUESTIONS☒ NO -- SKIP TO "FIRE DATA" BELOW☐ UNKNOWN -- SKIP TO "FIRE DATA" BELOW

<b>ROLLOVER BEGAN</b>	<input type="checkbox"/> On roadway <input type="checkbox"/> On shoulder <input type="checkbox"/> On roadside or median <input type="checkbox"/> Unknown
<b>ROLLOVER CAUSE?</b>	<input type="checkbox"/> Other vehicle (specify vehicle number) _____ <input type="checkbox"/> Contact to object (specify): _____ <input type="checkbox"/> Other cause (specify): _____ <input type="checkbox"/> Unknown
<b>DIRECTION OF VEHICLE ROLL?</b>	<input type="checkbox"/> Toward the right (passenger side) <input type="checkbox"/> Toward the left (driver side) <input type="checkbox"/> End-over-end <input type="checkbox"/> Unknown
<b>NUMBER OF TURNS</b>	_____ Number of QUARTER TURNS <input type="checkbox"/> Unknown _____ Number of COMPLETE TURNS
<b>PLANE IN CONTACT WITH GROUND AT FINAL REST?</b>	<input type="checkbox"/> Left side <input type="checkbox"/> Top <input type="checkbox"/> Right side <input type="checkbox"/> Wheels <input type="checkbox"/> Unknown

**FIRE DATA**

DID THIS VEHICLE EXPERIENCE A FIRE?

☐ YES -- ASK THE FOLLOWING QUESTIONS☒ NO -- SKIP THIS SECTION☐ UNKNOWN -- SKIP THIS SECTION

<b>FIRE STARTED, OR SMOKE WAS FIRST SEEN ...</b>	<input type="checkbox"/> Under the hood <input type="checkbox"/> In the trunk/cargo area <input type="checkbox"/> Behind the instrument panel <input type="checkbox"/> Under the vehicle <input type="checkbox"/> In the passenger compartment <input type="checkbox"/> From other involved vehicle <input type="checkbox"/> Unknown
<b>FIRE START WITH THE ELECTRICAL SYSTEM?</b> <input type="checkbox"/> No <input type="checkbox"/> Unknown	<input type="checkbox"/> Yes (specify):
<b>FIRE START WITH THE FUEL SYSTEM?</b> <input type="checkbox"/> No <input type="checkbox"/> Unknown	<input type="checkbox"/> Yes -- specify Which part of the fuel system may have been involved? <input type="checkbox"/> Fuel tank <input type="checkbox"/> Fuel lines <input type="checkbox"/> Engine compartment (specify component if known) <input type="checkbox"/> Unknown

Describe any additional rollover or fire information here:



### ADDITIONAL VEHICLE INFORMATION

<b>YEAR, MAKE AND MODEL?</b>	Year: 19 <u>86</u> Make: <u>Chevrolet</u> Model: <u>Celebrity</u>
<b>PREVIOUS OR POST-CRASH DAMAGE?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes - describe:  <input type="checkbox"/> Unknown
<b>DOORS OR HATCH OPEN DURING THE CRASH?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> LF <input type="checkbox"/> RF <input type="checkbox"/> LR <input type="checkbox"/> RR <input type="checkbox"/> HATCH <input type="checkbox"/> OTHER _____ <input type="checkbox"/> Unknown
<b>WINDOWS BREAK DURING THE CRASH?</b>	<input checked="" type="checkbox"/> No                      Check all that apply <input type="checkbox"/> Yes <input type="checkbox"/> WS <input type="checkbox"/> LF <input type="checkbox"/> RF <input type="checkbox"/> LR <input type="checkbox"/> RR <input type="checkbox"/> BL <input type="checkbox"/> Roof <input type="checkbox"/> Other  <input type="checkbox"/> Unknown
<b>WINDOW PRECRASH STATUS</b>	<u>All closed per driver</u> <input type="checkbox"/> WS <input type="checkbox"/> LF <input type="checkbox"/> RF <input type="checkbox"/> LR <input type="checkbox"/> RR <input type="checkbox"/> BL <input type="checkbox"/> Roof <input type="checkbox"/> Other  "O" = open                      "C" = Closed "P" = partially open        "U" = Unknown
<b>GLOVE COMPARTMENT DOOR OPEN DURING THE CRASH?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes - describe:  <input type="checkbox"/> Unknown
<b>CARGO IN THE VEHICLE?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - describe: <u>NORMAL stuff in trunk</u> Approximate weight - _____ pounds
<b>VEHICLE MILEAGE</b>	_____ miles <input checked="" type="checkbox"/> Unknown
<b>IF VEHICLE HAS NOT BEEN INSPECTED</b>	Current location of the vehicle: _____ _____ Contact person: _____
Detail any notes, questions to ask interviewee (i.e., rescue personnel damage to vehicle) or directions to vehicle location: <u>I don't remember anything until Emergency people came to help me out of car.</u>	

**SPECIAL CRASH INVESTIGATION ADDENDUM: DRIVER INFORMATION**

Do you recall the type of development in the area of the crash?	<input checked="" type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/> Undeveloped <input type="checkbox"/> School <input type="checkbox"/> Other: _____
What were the weather conditions at the time of the crash?	<input checked="" type="checkbox"/> Clear (no clouds, no precipitation) <input type="checkbox"/> Cloudy (partially cloudy, no precipitation) <input type="checkbox"/> Overcast (full cloud cover, no precipitation) <input type="checkbox"/> Precipitating <input type="checkbox"/> Unknown
What was the type of precipitation?	<input checked="" type="checkbox"/> No precipitation <input type="checkbox"/> Unknown <input type="checkbox"/> Raining <input type="checkbox"/> Freezing rain <input type="checkbox"/> Sleet <input type="checkbox"/> Snowing <input type="checkbox"/> Hailing
What was the condition of the road surface?	<input checked="" type="checkbox"/> Dry <input type="checkbox"/> Wet <input type="checkbox"/> Snowy, slushy <input type="checkbox"/> Icy <input type="checkbox"/> Other (e.g., sand, dirt, oil on surface, etc.) <input type="checkbox"/> Unknown
How would you describe the amount of traffic at the time of the crash?	<input type="checkbox"/> Heavy <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Light <input type="checkbox"/> No other traffic present
What is your occupation?	<input type="checkbox"/> Professional <input type="checkbox"/> Technical <input type="checkbox"/> Government official <input type="checkbox"/> Management <input type="checkbox"/> Proprietors <input type="checkbox"/> Sales <input type="checkbox"/> Clerical <input type="checkbox"/> Craftsman and foreman <input type="checkbox"/> Service worker <input type="checkbox"/> Student <input type="checkbox"/> Farmers and farm-managers <input type="checkbox"/> Farm labors and foreman <input type="checkbox"/> Private household worker <input type="checkbox"/> Housewife <input type="checkbox"/> Other: <u>RETIRED.</u>
How long have you driven this vehicle?	Years: <u>4-5</u> Months: _____
How many miles do you think that you have driven it in the last 12-month period?	Miles: <u>5000</u>
How often do you drive this particular roadway?	<input checked="" type="checkbox"/> Daily <input type="checkbox"/> Twice weekly <input type="checkbox"/> Once weekly <input type="checkbox"/> Twice monthly <input type="checkbox"/> Once monthly <input type="checkbox"/> Very infrequently <input type="checkbox"/> First time on road
Where were you coming from just prior to the crash?	<input type="checkbox"/> Home <input type="checkbox"/> Work <input type="checkbox"/> School <input type="checkbox"/> Shopping <input type="checkbox"/> Social/recreational <input type="checkbox"/> Restaurant <input checked="" type="checkbox"/> Personal business <input type="checkbox"/> Other: _____
Where were you intending to go when the crash occurred?	<input type="checkbox"/> Home <input type="checkbox"/> Work <input type="checkbox"/> School <input type="checkbox"/> Shopping <input type="checkbox"/> Social/recreational <input type="checkbox"/> Restaurant <input type="checkbox"/> Personal business <input type="checkbox"/> Other: <u>Post office</u>

**HOW MANY PEOPLE WERE IN THE VEHICLE AT THE TIME OF THE CRASH?**

	DRIVER	OCCUPANT # ____	OCCUPANT # ____
<b>SEATING POSITION?</b> Front Left (FL)      Second Left (2L) Front Middle (FM)    Second Middle (2M) Front Right (FR)     Second Right (2R)  Third Left (3L)       Other (SPECIFY in block) Third Middle (3M) Third Right (3R)	<b>FRONT LEFT</b>		
<b>SEX, HEIGHT, WEIGHT, AND AGE?</b>  <b>CIRCLE DRIVER'S RACE:</b> White <u>Black</u> Eskimo or Aleut    Asian or Pacific Islander  Other (specify): Unknown	<input type="checkbox"/> M <input checked="" type="checkbox"/> F - Not pregnant <input type="checkbox"/> F - Pregnant - # of months ____ <input type="checkbox"/> F - Unk. if pregnant  HEIGHT: <u>5'3"</u> WEIGHT: <u>172</u> AGE: _____  DRIVER OF HISPANIC ORIGIN? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> U	<input type="checkbox"/> M <input type="checkbox"/> F - Not pregnant <input type="checkbox"/> F - Pregnant - # of months ____ <input type="checkbox"/> F - Unk. if pregnant  HEIGHT: _____ WEIGHT: _____ AGE: _____  	<input type="checkbox"/> M <input type="checkbox"/> F - Not pregnant <input type="checkbox"/> F - Pregnant - # of months ____ <input type="checkbox"/> F - Unk. if pregnant  HEIGHT: _____ WEIGHT: _____ AGE: _____  
<b>OCCUPANT POSTURE</b>  A) Kneeling or standing on seat B) Lying on or across seat C) Kneeling, standing or sitting in front of seat D) Sitting sideways, turned to side or back E) Sitting on console F) Lying back in reclined position G) Other (specify) H) Unknown	<input type="checkbox"/> Leaning to left <input type="checkbox"/> Leaning to right <input checked="" type="checkbox"/> Sitting upright <input type="checkbox"/> Unknown  Indicate all letters that apply and describe if other than above	<input type="checkbox"/> Leaning to left <input type="checkbox"/> Leaning to right <input type="checkbox"/> Sitting upright <input type="checkbox"/> Unknown  Indicate all letters that apply and describe if other than above	<input type="checkbox"/> Leaning to left <input type="checkbox"/> Leaning to right <input type="checkbox"/> Sitting upright <input type="checkbox"/> Unknown  Indicate all letters that apply and describe if other than above
<b>FEET AND HANDS/ARMS LOCATION JUST PRIOR TO IMPACT</b>  <u>FEET</u> A) On floor or foot controls B) One or both on dash C) One or both on seat D) Other (specify) E) Unknown  <u>HANDS / ARMS</u> F) Both hands on steering wheel G) One on wheel, other hand resting or adjusting a control (specify hand on wheel and control involved) H) Dialing a cellular phone (specify location and type of phone) I) Holding a cellular phone (specify location and type of phone) J) Bracing with one or both hands K) On lap L) One or both out of window (specify) M) Other (specify) N) Unknown	Indicate all letters that apply and further describe as needed  <div style="font-size: 2em; text-align: center;">A</div>  <div style="font-size: 2em; text-align: center;">F</div>	Indicate all letters that apply and further describe as needed	Indicate all letters that apply and further describe as needed

**OCCUPANT DATA CONTINUED ON NEXT PAGE**

OCCUPANT DATA CONTINUED ON NEXT PAGE



**OCCUPANT DATA QUESTIONS (continued)**

	DRIVER	OCCUPANT # ____	OCCUPANT # ____																																																		
<b>BACK UP AGAINST THE SEAT BACK?</b>	<input type="checkbox"/> No (describe) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No (describe) <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No (describe) <input type="checkbox"/> Yes <input type="checkbox"/> Unknown																																																		
<b>ADJUSTABLE SEAT TRACK, IF "YES" WHERE WAS THE TRACK PRIOR TO IMPACT?</b>	<input type="checkbox"/> Not adjustable <input checked="" type="checkbox"/> Seat all the way forward <input type="checkbox"/> Between forward and middle <input type="checkbox"/> At middle position <input type="checkbox"/> Between middle and rear position <input type="checkbox"/> Seat all the way rearward <input type="checkbox"/> Unknown	<input type="checkbox"/> Not adjustable <input type="checkbox"/> Seat all the way forward <input type="checkbox"/> Between forward and middle <input type="checkbox"/> At middle position <input type="checkbox"/> Between middle and rear position <input type="checkbox"/> Seat all the way rearward <input type="checkbox"/> Unknown	<input type="checkbox"/> Not adjustable <input type="checkbox"/> Seat all the way forward <input type="checkbox"/> Between forward and middle <input type="checkbox"/> At middle position <input type="checkbox"/> Between middle and rear position <input type="checkbox"/> Seat all the way rearward <input type="checkbox"/> Unknown																																																		
<b>ADJUSTABLE SEAT BACK, IF "YES" WHERE WAS THE BACK PRE AND POST IMPACT</b>	<table border="0"> <tr> <td><u>PRE</u></td> <td><u>POST</u></td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/> <i>Per VI</i></td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/> Not adjustable</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/> Completely upright</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/> Slightly reclined</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/> Completely reclined</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/> Slightly forward of upright</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/> Completely forward</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/> Unknown</td> </tr> </table>	<u>PRE</u>	<u>POST</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <i>Per VI</i>	<input type="checkbox"/>	<input type="checkbox"/> Not adjustable	<input type="checkbox"/>	<input type="checkbox"/> Completely upright	<input type="checkbox"/>	<input type="checkbox"/> Slightly reclined	<input type="checkbox"/>	<input type="checkbox"/> Completely reclined	<input type="checkbox"/>	<input type="checkbox"/> Slightly forward of upright	<input type="checkbox"/>	<input type="checkbox"/> Completely forward	<input type="checkbox"/>	<input type="checkbox"/> Unknown	<table border="0"> <tr> <td><u>PRE</u></td> <td><u>POST</u></td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/> Not adjustable</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/> Completely upright</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/> Slightly reclined</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/> Completely reclined</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/> Slightly forward of upright</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/> Completely forward</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/> Unknown</td> </tr> </table>	<u>PRE</u>	<u>POST</u>	<input type="checkbox"/>	<input type="checkbox"/> Not adjustable	<input type="checkbox"/>	<input type="checkbox"/> Completely upright	<input type="checkbox"/>	<input type="checkbox"/> Slightly reclined	<input type="checkbox"/>	<input type="checkbox"/> Completely reclined	<input type="checkbox"/>	<input type="checkbox"/> Slightly forward of upright	<input type="checkbox"/>	<input type="checkbox"/> Completely forward	<input type="checkbox"/>	<input type="checkbox"/> Unknown	<table border="0"> <tr> <td><u>PRE</u></td> <td><u>POST</u></td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/> Not adjustable</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/> Completely upright</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/> Slightly reclined</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/> Completely reclined</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/> Slightly forward of upright</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/> Completely forward</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/> Unknown</td> </tr> </table>	<u>PRE</u>	<u>POST</u>	<input type="checkbox"/>	<input type="checkbox"/> Not adjustable	<input type="checkbox"/>	<input type="checkbox"/> Completely upright	<input type="checkbox"/>	<input type="checkbox"/> Slightly reclined	<input type="checkbox"/>	<input type="checkbox"/> Completely reclined	<input type="checkbox"/>	<input type="checkbox"/> Slightly forward of upright	<input type="checkbox"/>	<input type="checkbox"/> Completely forward	<input type="checkbox"/>	<input type="checkbox"/> Unknown
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<input type="checkbox"/>	<input type="checkbox"/> Unknown																																																				
<b>TILT STEERING COLUMN ADJUSTMENT PRIOR TO IMPACT</b>	<input checked="" type="checkbox"/> Not adjustable <input type="checkbox"/> Center <input type="checkbox"/> Full down	<input type="checkbox"/> Full up <input type="checkbox"/> Between center and full down <input type="checkbox"/> Unknown	<input type="checkbox"/> Between full up and center <input type="checkbox"/> Full down																																																		
<b>TELESCOPING STEERING COLUMN PRIOR TO IMPACT</b>	<input checked="" type="checkbox"/> Not adjustable <input type="checkbox"/> Midpoint <input type="checkbox"/> Full forward	<input type="checkbox"/> Full back <input type="checkbox"/> Between midpoint and full forward <input type="checkbox"/> Unknown	<input type="checkbox"/> Between full back and midpoint <input type="checkbox"/> Full forward																																																		

Did this vehicle have a cellular phone in it during the crash?

☒ No☐ Yes - describe type: \_\_\_\_\_

(e.g., portable, mounted in vehicle, flip phone, etc.)

☐ Unknown**(Note to researcher: try to determine any driver distractions without implying fault)****Was the driver doing any of the following? (check all that apply - and specify)**

- ☐ Talking to or listening to another occupant (specify):  
☐ Was there a moving object in vehicle (specify):  
☐ Talking or listening on a cellular phone (specify):  
☐ Dialing a cellular phone (specify):  
☐ Adjusting climate control (specify):  
☐ Adjusting radio, CD or cassette player (specify):  
☐ Using other device or object in vehicle (specify):  
☐ Sleepy / asleep (specify):  
☐ Distracted by outside person, object, or event (specify):  
☐ Eating or drinking (specify):  
☐ Smoking related (specify):  
☐ Other (specify):  
☐ Unknown

**RESTRAINT INFORMATION**

	DRIVER	OCCUPANT # ____	OCCUPANT # ____
<b>TYPE OF SEAT BELT AVAILABLE</b>  NOTE: If a belt is not available for a seat position -- describe reason	<input type="checkbox"/> Unknown <input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input checked="" type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Not available * * Describe:	<input type="checkbox"/> Unknown <input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Not available * * Describe:	<input type="checkbox"/> Unknown <input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Not available * * Describe:
<b>DO BELTS MOVE ALONG A MOTORIZED TRACK FOR THIS SEAT?</b> (i.e., 2-point automatic belt)	<input type="checkbox"/> Unknown <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes *	<input type="checkbox"/> Unknown <input type="checkbox"/> No <input type="checkbox"/> Yes *	<input type="checkbox"/> Unknown <input type="checkbox"/> No <input type="checkbox"/> Yes *
<b>IF "YES", WERE THEY WORKING PROPERLY?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No (describe)	<input type="checkbox"/> Yes <input type="checkbox"/> No (describe)	<input type="checkbox"/> Yes <input type="checkbox"/> No (describe)
<b>ARE ANY BELTS ATTACHED TO THE DOOR?</b> (i.e., 3-point automatic belt)	<input type="checkbox"/> Unknown <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes *	<input type="checkbox"/> Unknown <input type="checkbox"/> No <input type="checkbox"/> Yes *	<input type="checkbox"/> Unknown <input type="checkbox"/> No <input type="checkbox"/> Yes *
<b>* IF "YES", DOES IT CROSS:</b>	<input type="checkbox"/> Chest <input type="checkbox"/> Lap <input type="checkbox"/> Both	<input type="checkbox"/> Chest <input type="checkbox"/> Lap <input type="checkbox"/> Both	<input type="checkbox"/> Chest <input type="checkbox"/> Lap <input type="checkbox"/> Both
<b>OCCUPANT WEARING ANY SEATBELT?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown

**SKIP THE FOLLOWING IF NO SEAT BELT WAS WORN**

<b>TYPE OF BELT WORN?</b>	<input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Unknown	<input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Unknown	<input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Unknown
<b>LAP BELT SITUATED?</b>	<input type="checkbox"/> Low on lap <input type="checkbox"/> Across stomach <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Low on lap <input type="checkbox"/> Across stomach <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Low on lap <input type="checkbox"/> Across stomach <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown
<b>SHOULDER BELT SITUATED?</b>	<input type="checkbox"/> Over shoulder <input type="checkbox"/> Under the arm <input type="checkbox"/> Behind back <input type="checkbox"/> Behind seat <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Over shoulder <input type="checkbox"/> Under the arm <input type="checkbox"/> Behind back <input type="checkbox"/> Behind seat <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Over shoulder <input type="checkbox"/> Under the arm <input type="checkbox"/> Behind back <input type="checkbox"/> Behind seat <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown

Describe any breaks, tears, or failures to any of the seat belts:

**EJECTION, ENTRAPMENT, MOBILITY INFORMATION**

	DRIVER	OCCUPANT # ____	OCCUPANT # ____
<b>ANY PART OF BODY THROWN OUTSIDE THE VEHICLE DURING THE CRASH?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes * <input type="checkbox"/> Unknown  * If "Yes" - what part(s) were ejected, and what area of the vehicle was involved.	<input type="checkbox"/> No <input type="checkbox"/> Yes * <input type="checkbox"/> Unknown  * If "Yes" - what part(s) were ejected, and what area of the vehicle was involved.	<input type="checkbox"/> No <input type="checkbox"/> Yes * <input type="checkbox"/> Unknown  * If "Yes" - what part(s) were ejected, and what area of the vehicle was involved.
<b>ANYONE PINNED IN THE VEHICLE?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes ____ physically pinned ____ jammed doors ____ fire, etc. <input type="checkbox"/> Unknown  Detail any entrapment	<input type="checkbox"/> No <input type="checkbox"/> Yes ____ physically pinned ____ jammed doors ____ fire, etc. <input type="checkbox"/> Unknown  Detail any entrapment	<input type="checkbox"/> No <input type="checkbox"/> Yes ____ physically pinned ____ jammed doors ____ fire, etc. <input type="checkbox"/> Unknown  Detail any entrapment
<b>HOW DID OCCUPANT(S) EXIT THE VEHICLE?</b>	<input type="checkbox"/> Fatal before removed <input type="checkbox"/> Removed while unconscious, or not oriented to time or place <input checked="" type="checkbox"/> Removed due to perceived serious injuries <input type="checkbox"/> Exited with some assistance <input type="checkbox"/> Exited under own power <input type="checkbox"/> Fully ejected <input type="checkbox"/> Unknown	<input type="checkbox"/> Fatal before removed <input type="checkbox"/> Removed while unconscious, or not oriented to time or place <input type="checkbox"/> Removed due to perceived serious injuries <input type="checkbox"/> Exited with some assistance <input type="checkbox"/> Exited under own power <input type="checkbox"/> Fully ejected <input type="checkbox"/> Unknown	<input type="checkbox"/> Fatal before removed <input type="checkbox"/> Removed while unconscious, or not oriented to time or place <input type="checkbox"/> Removed due to perceived serious injuries <input type="checkbox"/> Exited with some assistance <input type="checkbox"/> Exited under own power <input type="checkbox"/> Fully ejected <input type="checkbox"/> Unknown
Further describe any ejection, entrapment, or mobility information here:			

**AIR BAG INFORMATION**

WAS THIS VEHICLE EVER EQUIPPED WITH AN AIR BAG?

☐ YES (IF "YES" COMPLETE THIS SECTION)☒ NO ☐ UNKNOWN (IF "NO" OR "UNKNOWN" SKIP THIS SECTION)

	DRIVER SIDE FRONTAL	PASSENGER SIDE FRONTAL OCCUPANT # ____	"OTHER" AIR BAG SPECIFY: _____ OCCUPANT # ____
<b>VEHICLE BEEN IN ANY PREVIOUS CRASHES?</b>  <input type="checkbox"/> NO <input type="checkbox"/> YES - continue to right <input type="checkbox"/> UNKNOWN - go to box below	<input type="checkbox"/> Prior crash <u>without</u> deployment <input type="checkbox"/> One prior crash <u>with</u> deployment <input type="checkbox"/> > 1, <u>with</u> at least one deployment <input type="checkbox"/> Previous accident(s) unknown if deployed  <u>IF PRIOR DEPLOYMENT</u> <input type="checkbox"/> CHECK IF <u>NOT</u> REINSTALLED	<input type="checkbox"/> Prior crash <u>without</u> deployment <input type="checkbox"/> One prior crash <u>with</u> deployment <input type="checkbox"/> > 1, <u>with</u> at least one deployment <input type="checkbox"/> Previous accident(s) unknown if deployed  <u>IF PRIOR DEPLOYMENT</u> <input type="checkbox"/> CHECK IF <u>NOT</u> REINSTALLED	<input type="checkbox"/> Prior crash <u>without</u> deployment <input type="checkbox"/> One prior crash <u>with</u> deployment <input type="checkbox"/> > 1, <u>with</u> at least one deployment <input type="checkbox"/> Previous accident(s) unknown if deployed  <u>IF PRIOR DEPLOYMENT</u> <input type="checkbox"/> CHECK IF <u>NOT</u> REINSTALLED
<b>TYPE OF AIR BAG?</b>	<input type="checkbox"/> Original equipment <input type="checkbox"/> Retrofitted <input type="checkbox"/> Replacement <input type="checkbox"/> Unknown	<input type="checkbox"/> Original equipment <input type="checkbox"/> Retrofitted <input type="checkbox"/> Replacement <input type="checkbox"/> Unknown	<input type="checkbox"/> Original equipment <input type="checkbox"/> Retrofitted <input type="checkbox"/> Replacement <input type="checkbox"/> Unknown
<b>PRIOR SERVICE ON THE AIR BAG SYSTEM?</b>	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:
<b>DID AIR BAG INFLATE DURING THIS CRASH?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> Unknown <input type="checkbox"/> No  If "NO" was the wiring disconnected prior to the crash?  <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	<input type="checkbox"/> Yes <input type="checkbox"/> Unknown <input type="checkbox"/> No  If "NO" was the wiring disconnected prior to the crash?  <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	<input type="checkbox"/> Yes <input type="checkbox"/> Unknown <input type="checkbox"/> No  If "NO" was the wiring disconnected prior to the crash?  <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk
<b>WAS THIS PERSON WEARING ANY TYPE OF EYE-WEAR (EYE/ SUNGLASSES OR CONTACT LENSES) ANY JEWELRY, OR HAVE ANY OBJECTS IN MOUTH OR HAND?</b>	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:
<b>WAS THE AIR BAG IN THIS POSITION CONTACTED BY ANOTHER OCCUPANT?</b>	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:

Describe any additional information here:

**CHILD SAFETY SEAT INFORMATION**

WAS THERE A PERSON IN A CHILD SAFETY SEAT IN THIS VEHICLE?


☐ YES (IF "YES" COMPLETE THIS SECTION)☒ NO ☐ UNKNOWN (IF "NO" OR "UNKNOWN" SKIP THIS SECTION)

	DRIVER	OCCUPANT # ____	OCCUPANT # ____
MAKE AND MODEL OF THE SAFETY SEAT?			
TYPE OF SEAT?		<input type="checkbox"/> Infant <input type="checkbox"/> Toddler <input type="checkbox"/> Convertible <input type="checkbox"/> Booster <input type="checkbox"/> Integral <input type="checkbox"/> Other Specify: _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Infant <input type="checkbox"/> Toddler <input type="checkbox"/> Convertible <input type="checkbox"/> Booster <input type="checkbox"/> Integral <input type="checkbox"/> Other Specify: _____ <input type="checkbox"/> Unknown
DIRECTION FACING PRIOR TO THE CRASH?		<input type="checkbox"/> Front <input type="checkbox"/> Rearward <input type="checkbox"/> Unknown	<input type="checkbox"/> Front <input type="checkbox"/> Rearward <input type="checkbox"/> Unknown
VEHICLE'S SEAT BELT USED TO HOLD THE SEAT IN PLACE?		<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown
HOW WAS THE VEHICLE'S SEAT BELT SECURED TO THE CHILD SEAT?		<input type="checkbox"/> Looped through designated rear framing studs <input type="checkbox"/> Looped through arm rest slots <input type="checkbox"/> Belt across safety shield <input type="checkbox"/> Looped through rear frame outside the designated framing struts <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Looped through designated rear framing studs <input type="checkbox"/> Looped through arm rest slots <input type="checkbox"/> Belt across safety shield <input type="checkbox"/> Looped through rear frame outside the designated framing struts <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown
WHAT WAS THE CHILD SEAT EQUIPPED WITH AT TIME OF PURCHASE?		<input type="checkbox"/> Harness <input type="checkbox"/> Shield <input type="checkbox"/> Tether <input type="checkbox"/> Unknown	<input type="checkbox"/> Harness <input type="checkbox"/> Shield <input type="checkbox"/> Tether <input type="checkbox"/> Unknown
ANY OF THESE ADDED AFTER THEY OWNED THE SAFETY SEAT?		<input type="checkbox"/> Harness <input type="checkbox"/> Shield <input type="checkbox"/> Tether <input type="checkbox"/> None <input type="checkbox"/> Unknown	<input type="checkbox"/> Harness <input type="checkbox"/> Shield <input type="checkbox"/> Tether <input type="checkbox"/> None <input type="checkbox"/> Unknown

Describe any additional information here:



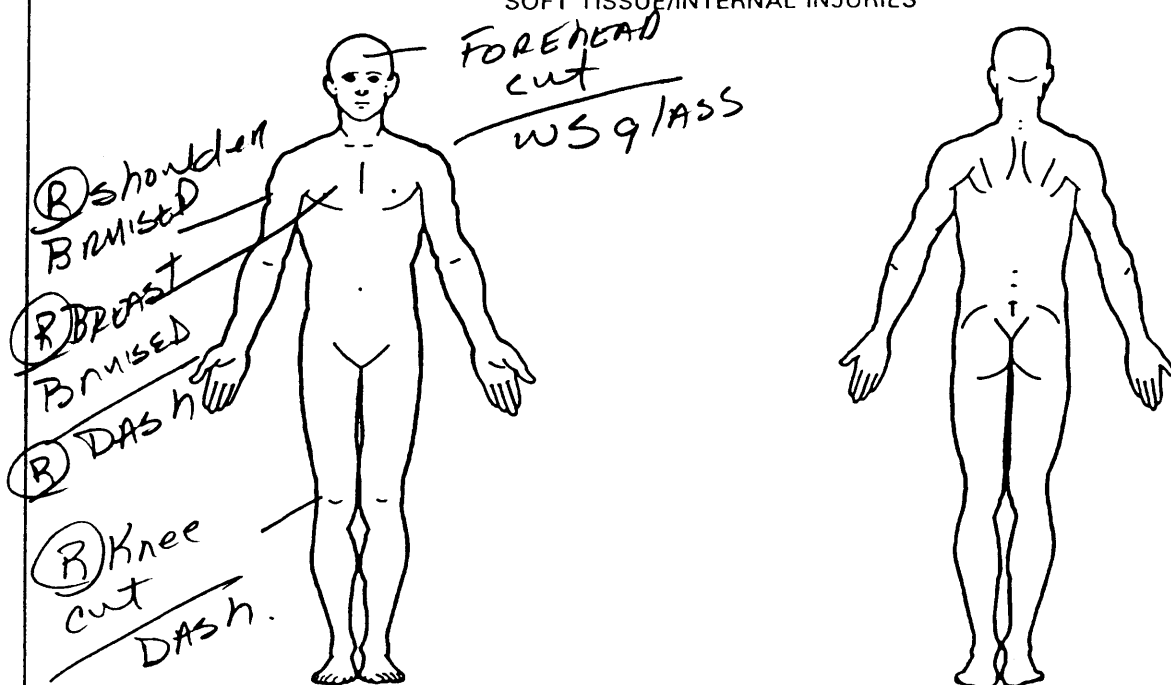
## INJURY INFORMATION

	DRIVER	OCCUPANT # ____	OCCUPANT # ____
<b>WERE YOU INJURED?</b> ▶ If "YES" go to manikin page and record injuries in detail ▶ If "NO" ask next questions	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown
<b>DID YOU HAVE ANY OF THE FOLLOWING:</b> <i>(If any injuries are checked, go to the manikin page and record location, lesion, and source)</i>	<input checked="" type="checkbox"/> Cuts <input checked="" type="checkbox"/> Abrasions <input type="checkbox"/> Bruises <input checked="" type="checkbox"/> Broken bones <input type="checkbox"/> Head, skull, brain <input type="checkbox"/> Internal injury <input type="checkbox"/> Sprains, strains <input type="checkbox"/> Other - specify on manikin	<input type="checkbox"/> Cuts <input type="checkbox"/> Abrasions <input type="checkbox"/> Bruises <input type="checkbox"/> Broken bones <input type="checkbox"/> Head, skull, brain <input type="checkbox"/> Internal injury <input type="checkbox"/> Sprains, strains <input type="checkbox"/> Other - specify on manikin	<input type="checkbox"/> Cuts <input type="checkbox"/> Abrasions <input type="checkbox"/> Bruises <input type="checkbox"/> Broken bones <input type="checkbox"/> Head, skull, brain <input type="checkbox"/> Internal injury <input type="checkbox"/> Sprains, strains <input type="checkbox"/> Other - specify on manikin
<b>TRANSPORTED DIRECTLY FROM ACCIDENT SCENE FOR TREATMENT?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown
<b>RECEIVE ANY MEDICAL TREATMENT?</b> <i>(check all that apply)</i>	<input checked="" type="checkbox"/> Hospital <input type="checkbox"/> Medical clinic <input type="checkbox"/> Paramedics at scene <input type="checkbox"/> Doctor's office <input type="checkbox"/> Treated by self <input type="checkbox"/> Unknown	<input type="checkbox"/> Hospital <input type="checkbox"/> Medical clinic <input type="checkbox"/> Paramedics at scene <input type="checkbox"/> Doctor's office <input type="checkbox"/> Treated by self <input type="checkbox"/> Unknown	<input type="checkbox"/> Hospital <input type="checkbox"/> Medical clinic <input type="checkbox"/> Paramedics at scene <input type="checkbox"/> Doctor's office <input type="checkbox"/> Treated by self <input type="checkbox"/> Unknown
<b>HOSPITALIZED?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes - # of days <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes - # of days <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes - # of days <input type="checkbox"/> Unknown
<b>TREATED AND RELEASED FROM THE EMERGENCY ROOM?</b>	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown
<b>NAME OF MEDICAL TREATMENT FACILITY?</b>			
<b>RECEIVE ANY FOLLOW-UP TREATMENT?</b>	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes - describe any additional injuries diagnosed: _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes - describe any additional injuries diagnosed: _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes - describe any additional injuries diagnosed: _____ <input type="checkbox"/> Unknown
<b>LOST ANY DAYS FROM WORK OR SCHOOL (COLLEGE) DUE TO THE CRASH?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Not working prior to crash <input type="checkbox"/> Yes - # of days <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Not working prior to crash <input type="checkbox"/> Yes - # of days <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Not working prior to crash <input type="checkbox"/> Yes - # of days <input type="checkbox"/> Unknown
<b>IF REQUIRED:</b> <b>WILL YOU SIGN A MEDICAL RELEASE?</b> <i>* If not an in-person interview, make appointment to have release signed</i>	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes* maybe <input checked="" type="checkbox"/> Unknown DATE: _____ TIME: _____ PLACE: _____	<input type="checkbox"/> No <input type="checkbox"/> Yes* <input type="checkbox"/> Unknown DATE: _____ TIME: _____ PLACE: _____	<input type="checkbox"/> No <input type="checkbox"/> Yes* <input type="checkbox"/> Unknown DATE: _____ TIME: _____ PLACE: _____

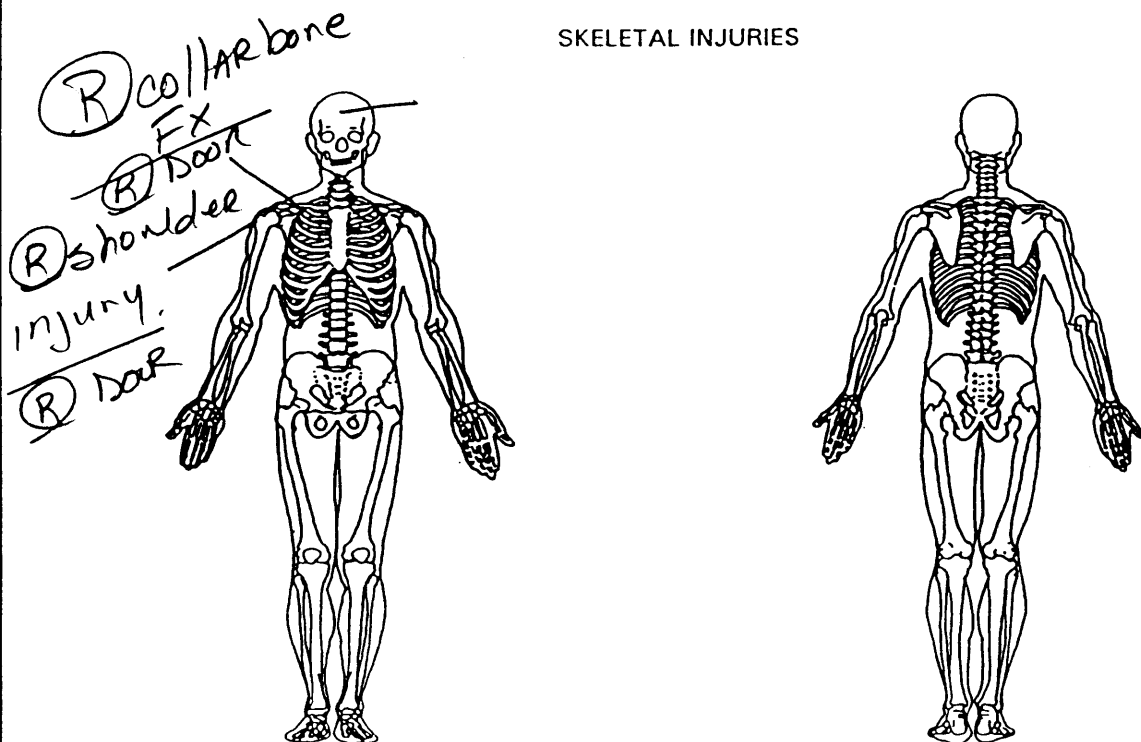
PSU Number 10 Case Number—Stratum 9612 Vehicle Number 02 Occupant Number 01**INJURY DATA FROM INTERVIEWEE(S)**

Indicate the Location, Lesion, Detail, and Source of all injuries. Specify interviewee(s): \_\_\_\_\_

## SOFT TISSUE/INTERNAL INJURIES



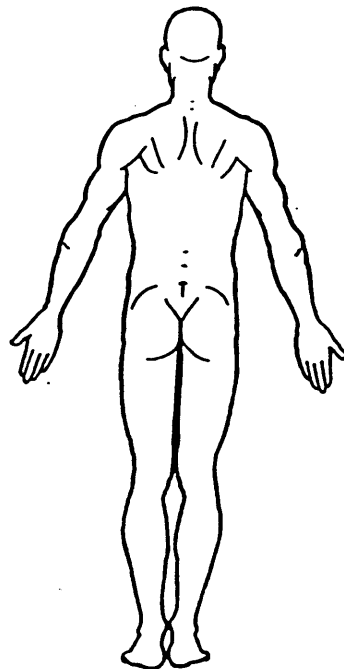
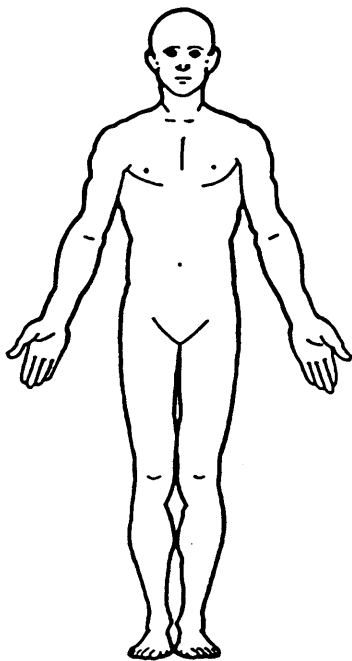
## SKELETAL INJURIES



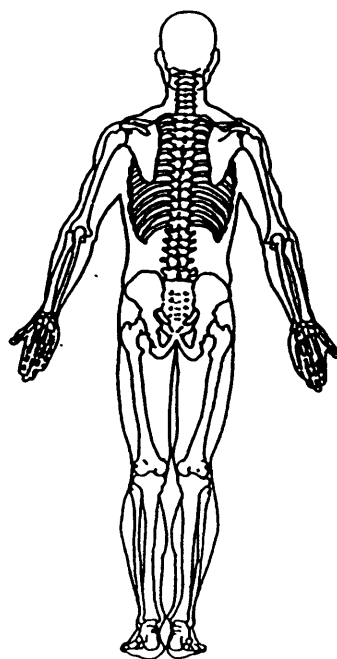
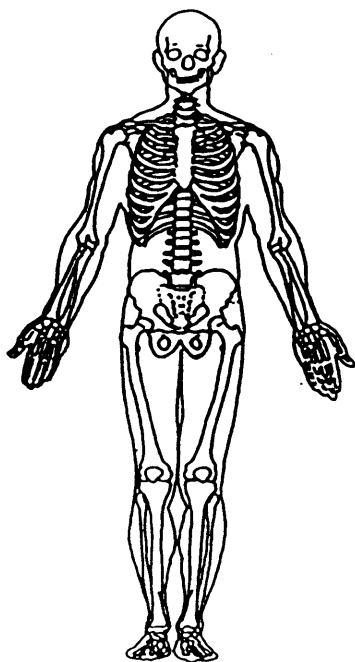
The space provided on the back of this page may be used to further detail injuries noted by the interviewee(s).

PSU Number 10 Case Number—Stratum 96 Vehicle Number \_\_\_\_\_ Occupant Number \_\_\_\_\_**INJURY DATA FROM INTERVIEWEE(S)**Indicate the *Location, Lesion, Detail, and Source* of all injuries. Specify interviewee(s): \_\_\_\_\_

## SOFT TISSUE/INTERNAL INJURIES



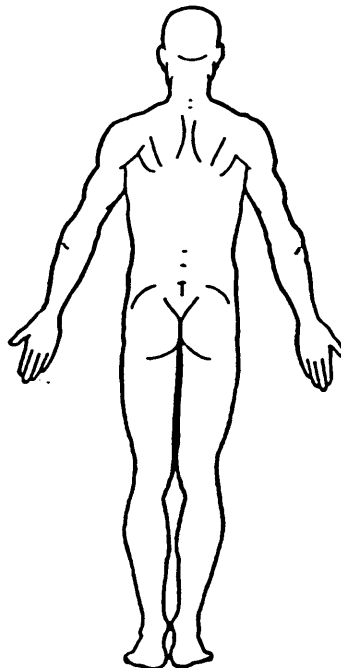
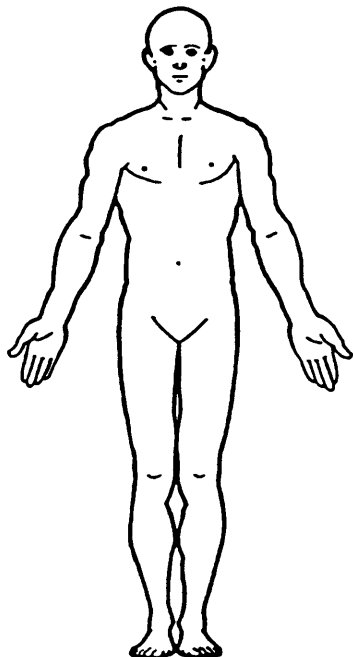
## SKELETAL INJURIES



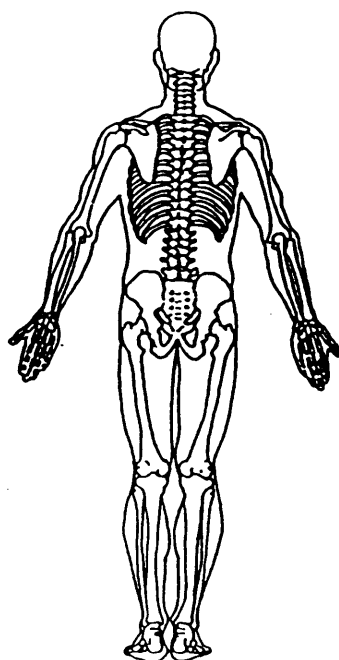
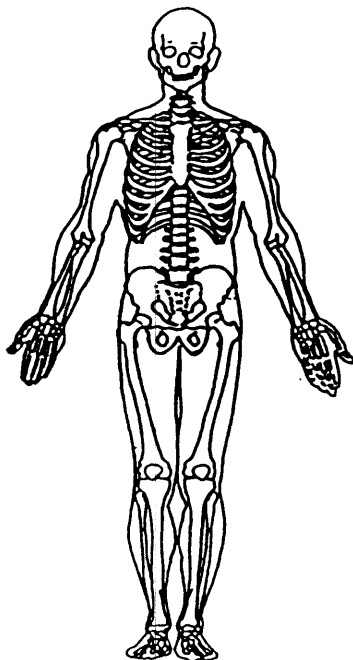
The space provided on the back of this page may be used to further detail injuries noted by the interviewee(s).

PSU Number 10 Case Number—Stratum 96 Vehicle Number \_\_\_\_\_ Occupant Number \_\_\_\_\_**INJURY DATA FROM INTERVIEWEE(S)**Indicate the *Location, Lesion, Detail, and Source* of all injuries. Specify interviewee(s): \_\_\_\_\_

## SOFT TISSUE/INTERNAL INJURIES



## SKELETAL INJURIES



The space provided on the back of this page may be used to further detail injuries noted by the interviewee(s).

**NASS CDS OCCUPANT ASSESSMENT FORM:**  
**CASE VEHICLE DRIVER**





## OCCUPANT ASSESSMENT FORM

1. Primary Sampling Unit Number

10

2. Case Number - Stratum

9612

3. Vehicle Number

01

4. Occupant Number

01

### OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

24

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

2

(1) Male

(2) Female-not reported pregnant

(3) Female-pregnant-1st trimester(1st-3rd month)

(4) Female-pregnant-2nd trimester(4th-6th month)

(5) Female-pregnant-3rd trimester(7th-9th month)

(6) Female-pregnant-term unknown

(9) Unknown

7. Occupant's Height

168

Code actual height to the nearest  
centimeter.

(999) Unknown

66 inches X 2.54 = 167.64 centimeters

8. Occupant's Weight

068

Code actual weight to the nearest  
kilogram.

(999) Unknown

150 pounds X .4536 = 68 kilograms

9. Occupant's Role

1

(1) Driver

(2) Passenger

(9) Unknown

### OCCUPANT'S SEATING

10. Occupant's Seat Position

11

*Front Seat*

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify):

(15) On or in the lap of another occupant

*Second Seat*

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify):

(25) On or in the lap of another occupant

*Third Seat*

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify):

(35) On or in the lap of another occupant

*Fourth Seat*

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify):

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify):

(99) Unknown

11. Occupant's Posture

0

(0) Normal posture

*Abnormal posture*

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with  
another occupant or to look out a rear  
window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in  
front of seat

(8) Other abnormal posture (specify):

(9) Unknown

**EJECTION/ENTRAPMENT**12. Ejection 0

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

13. Ejection Area 0

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

14. Ejection Medium 0

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_
- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_
- (9) Unknown

15. Medium Status (Immediately Prior To Impact) 0

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

16. Entrapment 0

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.  
(specify): \_\_\_\_\_
- (9) Unknown

17. Occupant Mobility 4

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or not oriented to time or place
- (2) Removed from vehicle due to perceived serious injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (8) Removed from vehicle for other reasons  
(specify): \_\_\_\_\_
- (9) Unknown

**BELT SYSTEM FUNCTION**18. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available — type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify):

(9) Unknown19. Manual (Active) Belt System Use 0 0

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify):

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used — type unknown
- (08) Other belt used (specify):

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat — type unknown
- (18) Other belt used with child safety seat (specify):
- (99) Unknown if belt used

20. Proper Use of Manual (Active) Belts 0

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):

(8) Other improper use of manual belt system (specify):(9) Unknown21. Manual (Active) Belt Failure Modes During Accident 0

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

- (6) Broken retractor
- (7) Combination of above (specify):

(8) Other manual belt failure (specify):(9) Unknown22. Manual Shoulder Belt Upper Anchorage Adjustment 4

- (0) No manual shoulder belt
- (1) No upper anchorage adjustment for manual shoulder belt

*Adjustable shoulder Belt Upper Anchorage*

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

23. Automatic (Passive) Belt System Availability/Function 0

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

*Non-functional*

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

24. Automatic (Passive) Belt System Use 0

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):
- (3) Automatic belt use unknown
- (9) Unknown

25. Automatic (Passive) Belt System Type 0

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

26. Proper Use of Automatic (Passive) Belt System 0

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

*Automatic Belt Used Improperly*

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or

automatic shoulder belt used improperly with child safety seat (specify):

- (8) Other improper use of automatic belt system (specify):
- (9) Unknown

27. Automatic (Passive) Belt Failure Modes During Accident 0

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

- (6) Broken retractor
- (7) Combination of above (specify):
- (8) Other automatic belt failure (specify):

(9) Unknown

**POLICE REPORTED RESTRAINT USE****AIR BAG SYSTEM FUNCTION**28. Police Reported Belt Use 4

- (0) None used  
 (1) Police did not indicate belt use  
 (2) Shoulder belt  
 (3) Lap belt  
 (4) Lap and shoulder belt  
 (5) Belt used, type not specified  
 (6) Child safety seat  
 (7) Automatic belt  
 (8) Other type belt, (specify):

(9) Police indicated "unknown"

29. Police Reported Air Bag Availability/Function 1

- (0) No air bag available  
 (1) Police did not indicate air bag availability/function  
 (2) Deployed  
 (3) Not deployed  
 (4) Unknown if deployed  
 (9) Police indicated "unknown"

Check the Primary Source Used In Determining Belt Use.

- ☒ Vehicle inspection  
☐ Official injury data  
☐ Driver/occupant interview  
☐ Other (specify):

☐ Unknown if belt used

30. Frontal Air Bag System Availability/Function (This Occupant Position) 1

- (0) Not equipped/not available  
 (1) Air bag

*Non-functional*

- (2) Air bag disconnected (specify):

(3) Air bag not reinstalled

(9) Unknown

31. Frontal Air Bag System Deployment (This Occupant Position) 1

- (0) Not equipped/not available  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

32. Other Than First Seat Frontal Air Bag Availability/Function (This Occupant Position) 0

- (0) Not equipped/not available  
 (1) Air bag

*Non-functional*

- (2) Air bag disconnected (specify):

(3) Air bag not reinstalled

(9) Unknown

*Specify type of "other" air bag present:*

33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) 0

- (0) Not equipped with an "other" air bag  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

34. Are There Indications of Air Bag System Failure? (This Occupant Position) 1

- (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify):

(9) Unknown

## FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? 1

- (0) Not equipped/not available  
(1) No previous accidents

Yes

- (2) Previous accident(s) without deployment(s)  
(3) One previous accident with deployment  
(4) More than one previous accident with at least one deployment  
(8) Previous accidents, unknown deployment status  
(9) Unknown

36. Type of Air Bag 1

- (0) Not equipped/not available  
(1) Original manufacturer installed system  
(2) Retrofitted air bag  
(3) Replacement air bag  
(8) Unknown type of air bag  
(9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? 1

- (0) Not equipped/not available  
(1) No prior maintenance  
(2) Yes, prior maintenance (specify): \_\_\_\_\_  
(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number 01

- (00) Not equipped/not available  
\_\_\_\_\_ Code the accident event sequence number that initiated the air bag deployment  
(96) Deployed, unknown event  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

39. CDC For Air Bag Deployment Impact 1

- (0) Not equipped/not available  
(1) Highest delta V  
(2) Second highest delta V  
(3) Other non-coded delta V (specify): \_\_\_\_\_  
(6) Deployed, unknown event  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

40. Longitudinal Component of Delta V For Air Bag Deployment Impact

- (\_000) Not equipped/not available  
Code the value of the delta V for the impact that initiated the air bag deployment  
(\_996) Deployment, unknown longitudinal Delta V  
(\_997) Not deployed  
(\_998) Unknown if deployed  
(\_999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? 2

- (0) Not equipped/not available  
(1) No  
(2) Yes  
(3) Deployed, unknown if flap(s) opened at designated tear points  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged? 1

- (0) Not equipped/not available  
(1) No  
(2) Yes (specify): \_\_\_\_\_  
(3) Deployed, unknown if air bag module cover flap(s) damaged  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

43. Was There Damage To The Air Bag? 01

- (00) Not equipped/not available  
(01) Not damaged

Yes - Air Bag Damage

- (02) Ruptured  
(03) Cut  
(04) Torn  
(05) Holed  
(06) Burned  
(07) Abraded  
(88) Other damage (specify): \_\_\_\_\_

- (95) Damaged, details unknown  
(96) Deployed, unknown if damaged  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown



**FIRST SEAT FRONTAL AIR BAG SYSTEM  
EVALUATION** *continued***HEAD RESTRAINT AND SEAT EVALUATION**44. Source of Air Bag Damage 01

- (00) Not equipped/not available  
 (01) Not damaged  
 (02) Object worn by occupant, (specify):

(03) Object carried by occupant, (specify):

(04) Adaptive/assistive controls, (specify):

- (05) Fire in vehicle  
 (06) Thermal burns  
 (07) Rescue or emergency efforts  
 (88) Other damage source (specify):

- (95) Damaged, unknown source  
 (96) Deployed, unknown if damaged  
 (97) Not deployed  
 (98) Unknown if deployed  
 (99) Unknown

45. Was The Air Bag Tethered? 1

- (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of tether straps):

- (3) Deployed, unknown if tethered  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown

46. Did The Air Bag Have Vent Ports? 2

- (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of vent ports):

- (3) Deployed, unknown if vent ports present  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown

47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? 1

- (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify):  
 (3) Deployed, unknown if other occupant contact to air bag  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown

48. Was This Occupant Wearing Eye-wear? 2

- (0) Not air bag equipped/air bag not available  
 (1) No  
 (2) Eyeglasses/sunglasses  
 (3) Contact lenses  
 (4) Deployed, unknown if eyewear worn  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown

49. Head Restraint Type/Damage by Occupant at This Occupant Position 1

- (0) No head restraints  
 (1) Integral—no damage  
 (2) Integral—damaged during accident  
 (3) Adjustable—no damage  
 (4) Adjustable—damaged during accident  
 (5) Add-on—no damage  
 (6) Add-on—damaged during accident  
 (8) Other (specify):

(9) Unknown

50. Seat Type (this Occupant Position) 09

- (00) Occupant not seated or no seat  
 (01) Bucket  
 (02) Bucket with folding back  
 (03) Bench  
 (04) Bench with separate back cushions  
 (05) Bench with folding back(s)  
 (06) Split bench with separate back cushions  
 (07) Split bench with folding back(s)  
 (08) Pedestal (i.e., column supported)  
 (09) Box mounted seat (i.e., van type)  
 (10) Other seat type (specify):

(99) Unknown

51. Seat Orientation (this Occupant Position) 1

- (0) Occupant not seated or no seat  
 (1) Forward facing seat  
 (2) Rear facing seat  
 (3) Side facing seat (inward)  
 (4) Side facing seat (outward)  
 (8) Other (specify):

(9) Unknown

52. Seat Track Adjusted Position Prior To Impact 4 \*

- (0) Occupant not seated or no seat  
 (1) Non-adjustable seat track

*Adjustable Seat Track*

- (2) Seat at forward most track position  
 (3) Seat between forward most and middle track positions  
 (4) Seat at middle track position  
 (5) Seat between middle and rear most track positions  
 (6) Seat at rear most track position  
 (9) Unknown

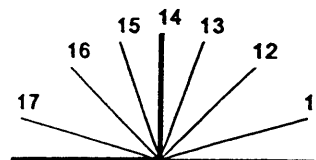
\* per driver, inspection showed in full rearward position which is unlikely due to driver Height.

**HEAD RESTRAINT AND SEAT EVALUATION** *continued*53. Seat Back Incline Prior and Post Impact 14

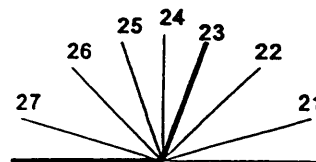
- (00) Occupant not seated or no seat  
 (01) Not adjustable

*Upright prior to impact*

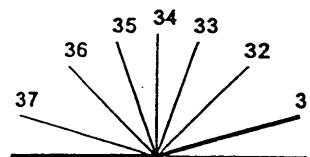
- (11) Moved to completely rearward position  
 (12) Moved to rearward midrange position  
 (13) Moved to slightly rearward position  
 (14) Retained pre-impact position  
 (15) Moved to slightly forward position  
 (16) Moved to forward midrange position  
 (17) Moved to completely forward position

*Slightly reclined prior to impact*

- (21) Moved to completely rearward position  
 (22) Moved to rearward midrange position  
 (23) Retained pre-impact position  
 (24) Moved to upright position  
 (25) Moved to slightly forward position  
 (26) Moved to forward midrange position  
 (27) Moved to completely forward position

*Completely reclined prior to impact*

- (31) Retained pre-impact position  
 (32) Moved to rearward midrange position  
 (33) Moved to slightly rearward position  
 (34) Moved to upright position  
 (35) Moved to slightly forward position  
 (36) Moved to forward midrange position  
 (37) Moved to completely forward position



(99) Unknown

54. Seat Performance (this Occupant Position) 1

- (0) Occupant not seated or no seat  
 (1) No seat performance failure(s)  
 (2) Seat adjusters failed  
 (3) Seat back folding locks or "seat back" failed (specify): \_\_\_\_\_  
 (4) Seat track/anchors failed  
 (5) Deformed by impact of occupant  
 (6) Deformed by passenger compartment intrusion, (specify): \_\_\_\_\_  
 (7) Combination of above (specify): \_\_\_\_\_  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

**CHILD SAFETY SEAT**

55. Child Safety Seat Make/Model 000  
 (000) No child safety seat  
 Applicable codes are found in your NASS CDS  
 Data Collection, Coding and Editing  
 (950) Built-in child safety seat  
 (997) Other make/model (specify):

(998) Unknown make/model  
 (999) Unknown if child safety seat used

56. Type of Child Safety Seat 0  
 (0) No child safety seat  
 (1) Infant seat  
 (2) Toddler seat  
 (3) Convertible seat  
 (4) Booster seat - with shield  
 (5) Booster seat - without shield  
 (7) Other type child safety seat (specify):  
 (8) Unknown child safety seat type  
 (9) Unknown if child safety seat used

57. Child Safety Seat Orientation 00  
 (00) No child safety seat

*Designed for Rear Facing for This Age/Weight*

(01) Rear facing  
 (02) Forward facing  
 (08) Other orientation (specify):

(09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*

(11) Rear facing  
 (12) Forward facing  
 (18) Other orientation (specify):

(19) Unknown orientation

*Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight*

(21) Rear facing  
 (22) Forward facing  
 (28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage 00

59. Child Safety Seat Shield Usage 00

60. Child Safety Seat Tether Usage 00

Note: Options below applicable to  
 Variables OA58-OA60.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*

(01) After market harness/shield/tether  
 added, not used  
 (02) After market harness/shield/tether used  
 (03) Child safety seat used, but no after market  
 harness/shield/tether added  
 (09) Unknown if harness/shield/tether  
 added or used

*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used  
 (12) Harness/shield/tether used  
 (19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used  
 (22) Harness/shield/tether used  
 (29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

**INJURY CONSEQUENCES**61. Injury Severity (Police Rating) 0

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

62. Treatment - Mortality 6

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):  
\_\_\_\_\_

*Nonfatal*

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later 2 DAYS later
- (7) Treatment - other (specify):  
\_\_\_\_\_
- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

63. Type Of Medical Facility (for Initial Treatment) 4

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):  
\_\_\_\_\_
- (9) Unknown

64. Hospital Stay 00

- (00) Not Hospitalized
- \_\_\_\_\_ Code the number of days (up through 60) that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

65. Working Days Lost 99

- \_\_\_\_\_ Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

*SINCE  
Accident***STOP WORK HERE****VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**

**TO BE CODED BY THE ZONE CENTER****INJURY CONSEQUENCES**66. Time to Death 00

Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)

(00) Not fatal

(96) Fatal - ruled disease

(99) Unknown

67. 1st Medically Reported Cause of Death 0068. 2nd Medically Reported Cause of Death 0069. 3rd Medically Reported Cause of Death 00

Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

(00) Not fatal or no additional causes

(96) Mode of death given but specific injuries are not linked to cause of death. (specify):

(97) Other result (includes fatal ruled disease) (specify):

(99) Unknown

70. Number of Recorded Injuries for This Occupant 99

Code the actual number of injuries recorded for this occupant.

(00) No recorded injuries

(97) Injured, details unknown

(99) Unknown if injured

**TRAUMA DATA**71. Glasgow Coma Scale (GCS) Score 99  
(at Medical Facility)

(00) Not injured

(01) Injured - not treated at medical facility

(02) No GCS Score at medical facility

(03-15) Code the actual value of the initial GCS Score recorded at medical facility.

(97) Injured, details unknown

(99) Unknown if injured

72. Was the Occupant Given Blood? 1

(1) No - blood not given

(2) Yes - blood given

(specify units):

(9) Unknown if blood given

73. Arterial Blood Gases (ABG) - HCO<sub>3</sub> 99

(00) Not injured

(01) Injured, ABGs not measured or reported

(02-50) Code the actual value of the HCO<sub>3</sub>(96) ABGs reported, HCO<sub>3</sub> unknown

(97) Injured, details unknown

(99) Unknown if injured

**BELT USE DETERMINATION**74. Primary Source of Belt Use Determination 1

(0) Not equipped/not available/destroyed or rendered inoperative

(1) Vehicle inspection

(2) Official injury data

(3) Driver/occupant interview

(8) Other (specify):

(9) Unknown if belt used



**NASS CDS OCCUPANT ASSESSMENT FORM:**  
**CASE VEHICLE FRONT RIGHT PASSENGER**



## OCCUPANT ASSESSMENT FORM

1. Primary Sampling Unit Number

10

2. Case Number - Stratum

9612

3. Vehicle Number

01

4. Occupant Number

02

### OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

04

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

2

(1) Male

(2) Female-not reported pregnant

(3) Female-pregnant-1st trimester(1st-3rd month)

(4) Female-pregnant-2nd trimester(4th-6th month)

(5) Female-pregnant-3rd trimester(7th-9th month)

(6) Female-pregnant-term unknown

(9) Unknown

7. Occupant's Height

109

Code actual height to the nearest  
centimeter.

(999) Unknown *Medical Examiner*

43 inches X 2.54 = 109 centimeters

8. Occupant's Weight

020

Code actual weight to the nearest  
kilogram.

(999) Unknown *Medical Examiner*

45 pounds X .4536 = 20.4 kilograms

9. Occupant's Role

2

(1) Driver

(2) Passenger

(9) Unknown

### OCCUPANT'S SEATING

10. Occupant's Seat Position

13

*Front Seat*

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify):

(15) On or in the lap of another occupant

*Second Seat*

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify):

(25) On or in the lap of another occupant

*Third Seat*

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify):

(35) On or in the lap of another occupant

*Fourth Seat*

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify):

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify):

(99) Unknown

11. Occupant's Posture

0

(0) Normal posture

*Abnormal posture*

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with  
another occupant or to look out a rear  
window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in  
front of seat

(8) Other abnormal posture (specify):

(9) Unknown

**EJECTION/ENTRAPMENT****12. Ejection**0

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

**13. Ejection Area**0

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

**14. Ejection Medium**0

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_
- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_
- (9) Unknown

**15. Medium Status (Immediately Prior To Impact)**0

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

**16. Entrapment**0

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.  
(specify): \_\_\_\_\_
- (9) Unknown

**17. Occupant Mobility**1

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or not oriented to time or place
- (2) Removed from vehicle due to perceived serious injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (8) Removed from vehicle for other reasons  
(specify): \_\_\_\_\_
- (9) Unknown

## BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify):

(9) Unknown19. Manual (Active) Belt System Use 0 0

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify):

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used—type unknown
- (08) Other belt used (specify):

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat—type unknown
- (18) Other belt used with child safety seat (specify):

(99) Unknown if belt used20. Proper Use of Manual (Active) Belts 0

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):

(8) Other improper use of manual belt system (specify):(9) Unknown21. Manual (Active) Belt Failure Modes During Accident 0

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

- (6) Broken retractor
- (7) Combination of above (specify):

(8) Other manual belt failure (specify):(9) Unknown22. Manual Shoulder Belt Upper Anchorage Adjustment 4

- (0) No manual shoulder belt
- (1) No upper anchorage adjustment for manual shoulder belt

*Adjustable shoulder Belt Upper Anchorage*

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

23. Automatic (Passive) Belt System Availability/Function 0

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

*Non-functional*

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

24. Automatic (Passive) Belt System Use 0

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):
- (3) Automatic belt use unknown
- (9) Unknown

25. Automatic (Passive) Belt System Type 0

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

26. Proper Use of Automatic (Passive) Belt System 0

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

*Automatic Belt Used Improperly*

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or

automatic shoulder belt used improperly with child safety seat (specify):

- (8) Other improper use of automatic belt system (specify):
- (9) Unknown

27. Automatic (Passive) Belt Failure Modes During Accident 0

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

- (6) Broken retractor
- (7) Combination of above (specify):
- (8) Other automatic belt failure (specify):

(9) Unknown

POLICE REPORTED RESTRAINT USE	AIR BAG SYSTEM FUNCTION
<p>28. Police Reported Belt Use <u>0</u></p> <p>(0) None used</p> <p>(1) Police did not indicate belt use</p> <p>(2) Shoulder belt</p> <p>(3) Lap belt</p> <p>(4) Lap and shoulder belt</p> <p>(5) Belt used, type not specified</p> <p>(6) Child safety seat</p> <p>(7) Automatic belt</p> <p>(8) Other type belt, (specify):</p> <p>_____</p> <p>(9) Police indicated "unknown"</p> <p>29. Police Reported Air Bag Availability/Function <u>1</u></p> <p>(0) No air bag available</p> <p>(1) Police did not indicate air bag availability/function</p> <p>(2) Deployed</p> <p>(3) Not deployed</p> <p>(4) Unknown if deployed</p> <p>(9) Police indicated "unknown"</p>	<p>30. Frontal Air Bag System Availability/Function (This Occupant Position) <u>1</u></p> <p>(0) Not equipped/not available</p> <p>(1) Air bag</p> <p><i>Non-functional</i></p> <p>(2) Air bag disconnected (specify):</p> <p>_____</p> <p>(3) Air bag not reinstalled</p> <p>(9) Unknown</p> <p>31. Frontal Air Bag System Deployment (This Occupant Position) <u>1</u></p> <p>(0) Not equipped/not available</p> <p>(1) Deployed during accident (as a result of impact)</p> <p>(2) Deployed inadvertently just prior to accident</p> <p>(3) Deployed, details unknown</p> <p>(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)</p> <p>(5) Unknown if deployed</p> <p>(7) Nondeployed</p> <p>(9) Unknown</p>
<p>Check the Primary Source Used In Determining Belt Use.</p> <p><input checked="" type="checkbox"/> Vehicle inspection</p> <p><input type="checkbox"/> Official injury data</p> <p><input type="checkbox"/> Driver/occupant interview</p> <p><input type="checkbox"/> Other (specify):</p> <p>_____</p> <p><input type="checkbox"/> Unknown if belt used</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>32. Other Than First Seat Frontal Air Bag Availability/Function (This Occupant Position) <u>0</u></p> <p>(0) Not equipped/not available</p> <p>(1) Air bag</p> <p><i>Non-functional</i></p> <p>(2) Air bag disconnected (specify):</p> <p>_____</p> <p>(3) Air bag not reinstalled</p> <p>(9) Unknown</p> <p><i>Specify type of "other" air bag present:</i></p> <p>_____</p> <p>33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) <u>0</u></p> <p>(0) Not equipped with an "other" air bag</p> <p>(1) Deployed during accident (as a result of impact)</p> <p>(2) Deployed inadvertently just prior to accident</p> <p>(3) Deployed, details unknown</p> <p>(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)</p> <p>(5) Unknown if deployed</p> <p>(7) Nondeployed</p> <p>(9) Unknown</p> <p>34. Are There Indications of Air Bag System Failure? (This Occupant Position) <u>1</u></p> <p>(0) Not equipped/not available</p> <p>(1) No</p> <p>(2) Yes (specify):</p> <p>_____</p> <p>(9) Unknown</p>



## FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? 1

- (0) Not equipped/not available  
(1) No previous accidents

Yes

- (2) Previous accident(s) without deployment(s)  
(3) One previous accident with deployment  
(4) More than one previous accident with at least one deployment  
(8) Previous accidents, unknown deployment status  
(9) Unknown

36. Type of Air Bag 1

- (0) Not equipped/not available  
(1) Original manufacturer installed system  
(2) Retrofitted air bag  
(3) Replacement air bag  
(8) Unknown type of air bag  
(9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? 1

- (0) Not equipped/not available  
(1) No prior maintenance  
(2) Yes, prior maintenance (specify):  
(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number 01

- (00) Not equipped/not available  
Code the accident event sequence number that initiated the air bag deployment  
(96) Deployed, unknown event  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

39. CDC For Air Bag Deployment Impact 1

- (0) Not equipped/not available  
(1) Highest delta V  
(2) Second highest delta V  
(3) Other non-coded delta V (specify):  
(6) Deployed, unknown event  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

40. Longitudinal Component of +Delta V For Air Bag Deployment Impact 0011

- ( \_ 000) Not equipped/not available  
Code the value of the delta V for the impact that initiated the air bag deployment  
( \_ 996) Deployment, unknown longitudinal Delta V  
( \_ 997) Not deployed  
( \_ 998) Unknown if deployed  
( \_ 999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? 2

- (0) Not equipped/not available  
(1) No  
(2) Yes  
(3) Deployed, unknown if flap(s) opened at designated tear points  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged? 2

- (0) Not equipped/not available  
(1) No  
(2) Yes (specify): Slightly Bent  
(3) Deployed, unknown if air bag module cover flap(s) damaged  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

43. Was There Damage To The Air Bag? 01

- (00) Not equipped/not available  
(01) Not damaged

Yes - Air Bag Damage

- (02) Ruptured  
(03) Cut  
(04) Torn  
(05) Holed  
(06) Burned  
(07) Abraded  
(88) Other damage (specify):

- (95) Damaged, details unknown  
(96) Deployed, unknown if damaged  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

**FIRST SEAT FRONTAL AIR BAG SYSTEM  
EVALUATION** *continued*

44. Source of Air Bag Damage 01  
 (00) Not equipped/not available  
 (01) Not damaged  
 (02) Object worn by occupant, (specify):  
 (03) Object carried by occupant, (specify):  
 (04) Adaptive/assistive controls, (specify):  
 (05) Fire in vehicle  
 (06) Thermal burns  
 (07) Rescue or emergency efforts  
 (88) Other damage source (specify):  
 (95) Damaged, unknown source  
 (96) Deployed, unknown if damaged  
 (97) Not deployed  
 (98) Unknown if deployed  
 (99) Unknown
45. Was The Air Bag Tethered? 2  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of tether straps):  
2 WIDE ones  
 (3) Deployed, unknown if tethered  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
46. Did The Air Bag Have Vent Ports? 1  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of vent ports):  
 (3) Deployed, unknown if vent ports present  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? 1  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify):  
 (3) Deployed, unknown if other occupant contact to air bag  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
48. Was This Occupant Wearing Eye-wear? 2  
 (0) Not air bag equipped/air bag not available  
 (1) No  
 (2) Eyeglasses sunglasses  
 (3) Contact lenses  
 (4) Deployed, unknown if eyewear worn  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown

**HEAD RESTRAINT AND SEAT EVALUATION**

49. Head Restraint Type/Damage by Occupant at This Occupant Position 1  
 (0) No head restraints  
 (1) Integral—no damage  
 (2) Integral—damaged during accident  
 (3) Adjustable—no damage  
 (4) Adjustable—damaged during accident  
 (5) Add-on—no damage  
 (6) Add-on—damaged during accident  
 (8) Other (specify):  
 (9) Unknown
50. Seat Type (this Occupant Position) 02  
 (00) Occupant not seated or no seat  
 (01) Bucket  
 (02) Bucket with folding back  
 (03) Bench  
 (04) Bench with separate back cushions  
 (05) Bench with folding back(s)  
 (06) Split bench with separate back cushions  
 (07) Split bench with folding back(s)  
 (08) Pedestal (i.e., column supported)  
 (09) Box mounted seat (i.e., van type)  
 (10) Other seat type (specify):  
 (99) Unknown
51. Seat Orientation (this Occupant Position) 1  
 (0) Occupant not seated or no seat  
 (1) Forward facing seat  
 (2) Rear facing seat  
 (3) Side facing seat (inward)  
 (4) Side facing seat (outward)  
 (8) Other (specify):  
 (9) Unknown
52. Seat Track Adjusted Position Prior To Impact 4 \*  
 (0) Occupant not seated or no seat  
 (1) Non-adjustable seat track  
 Adjustable Seat Track  
 (2) Seat at forward most track position  
 (3) Seat between forward most and middle track positions  
 (4) Seat at middle track position  
 (5) Seat between middle and rear most track positions  
 (6) Seat at rear most track position  
 (9) Unknown

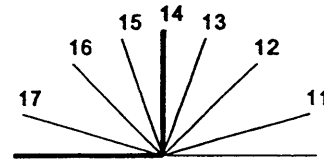
\* per mother / driver, veh inspection showed it was in full rearward position may have been moved by paramedics

HEAD RESTRAINT AND SEAT EVALUATION *continued*53. Seat Back Incline Prior and Post Impact 14

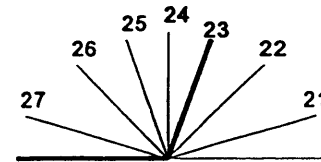
- (00) Occupant not seated or no seat  
 (01) Not adjustable

*Upright prior to impact*

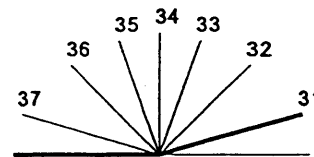
- (11) Moved to completely rearward position  
 (12) Moved to rearward midrange position  
 (13) Moved to slightly rearward position  
 (14) Retained pre-impact position  
 (15) Moved to slightly forward position  
 (16) Moved to forward midrange position  
 (17) Moved to completely forward position

*Slightly reclined prior to impact*

- (21) Moved to completely rearward position  
 (22) Moved to rearward midrange position  
 (23) Retained pre-impact position  
 (24) Moved to upright position  
 (25) Moved to slightly forward position  
 (26) Moved to forward midrange position  
 (27) Moved to completely forward position

*Completely reclined prior to impact*

- (31) Retained pre-impact position  
 (32) Moved to rearward midrange position  
 (33) Moved to slightly rearward position  
 (34) Moved to upright position  
 (35) Moved to slightly forward position  
 (36) Moved to forward midrange position  
 (37) Moved to completely forward position  
 (99) Unknown

54. Seat Performance (this Occupant Position) 1

- (0) Occupant not seated or no seat  
 (1) No seat performance failure(s)  
 (2) Seat adjusters failed  
 (3) Seat back folding locks or "seat back" failed (specify): \_\_\_\_\_  
 (4) Seat track/anchors failed  
 (5) Deformed by impact of occupant  
 (6) Deformed by passenger compartment intrusion, (specify): \_\_\_\_\_  
 (7) Combination of above (specify): \_\_\_\_\_  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

## CHILD SAFETY SEAT

55. Child Safety Seat Make/Model 0 0 0

(000) No child safety seat

Applicable codes are found in your NASS CDS

Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):

(998) Unknown make/model

(999) Unknown if child safety seat used

56. Type of Child Safety Seat 0

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat - with shield

(5) Booster seat - without shield

(7) Other type child safety seat (specify):

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

57. Child Safety Seat Orientation 0 0

(00) No child safety seat

*Designed for Rear Facing for This Age/Weight*

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):

(09) Unknown orientation*Designed For Forward Facing for This Age/Weight*

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):

(19) Unknown orientation*Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage 0 059. Child Safety Seat Shield Usage 0 060. Child Safety Seat Tether Usage 0 0

Note: Options below applicable to Variables OA58-OA60.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*

(01) After market harness/shield/tether added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market harness/shield/tether added

(09) Unknown if harness/shield/tether added or used

*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

**INJURY CONSEQUENCES****61. Injury Severity (Police Rating)** 4

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

**62. Treatment - Mortality** 1

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):  
\_\_\_\_\_

**Nonfatal**

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (7) Treatment - other (specify):  
\_\_\_\_\_
- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

**63. Type Of Medical Facility (for Initial Treatment)** 2

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):  
\_\_\_\_\_

- (9) Unknown

**64. Hospital Stay** 01

- (00) Not Hospitalized  
\_\_\_\_\_ Code the number of days (up through 60)  
that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

**65. Working Days Lost** 97

- \_\_\_\_\_ Code the number of days  
(up through 60) that the occupant  
lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

**STOP WORK HERE****VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**



**TO BE CODED BY THE ZONE CENTER****INJURY CONSEQUENCES****TRAUMA DATA**

## 66. Time to Death

31  
Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)

- (00) Not fatal  
(96) Fatal - ruled disease  
(99) Unknown

## 67. 1st Medically Reported Cause of Death

01

## 68. 2nd Medically Reported Cause of Death

00

## 69. 3rd Medically Reported Cause of Death

00

Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

- (00) Not fatal or no additional causes  
(96) Mode of death given but specific injuries are not linked to cause of death. (specify):

(97) Other result (includes fatal ruled disease) (specify):

(99) Unknown

## 70. Number of Recorded Injuries for This Occupant

10 Code the actual number of injuries recorded for this occupant.

- (00) No recorded injuries  
(97) Injured, details unknown  
(99) Unknown if injured

## 71. Glasgow Coma Scale (GCS) Score (at Medical Facility)

03

- (00) Not injured  
(01) Injured - not treated at medical facility  
(02) No GCS Score at medical facility  
(03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
(97) Injured, details unknown  
(99) Unknown if injured

## 72. Was the Occupant Given Blood?

2

- (1) No - blood not given  
(2) Yes - blood given  
(specify units):  
(9) Unknown if blood given

73. Arterial Blood Gases (ABG) - HCO<sub>3</sub>01

- (00) Not injured  
(01) Injured, ABGs not measured or reported  
(02-50) Code the actual value of the HCO<sub>3</sub>  
(96) ABGs reported, HCO<sub>3</sub> unknown  
(97) Injured, details unknown  
(99) Unknown if injured

**BELT USE DETERMINATION**

## 74. Primary Source of Belt Use Determination

1

- (0) Not equipped/not available/destroyed or rendered inoperative  
(1) Vehicle inspection  
(2) Official injury data  
(3) Driver/occupant interview  
(8) Other (specify):  
(9) Unknown if belt used

**NASS CDS OCCUPANT INJURY FORM:**  
**CASE VEHICLE FRONT RIGHT PASSENGER**



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

## OCCUPANT INJURY FORM

Form Approved  
O.M.B. No. 2127-0021  
NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number	<u>10</u>	3. Vehicle Number	<u>01</u>
2. Case Number - Stratum	<u>9612</u>	4. Occupant Number	<u>02</u>

### INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

Source of Injury Data	Body Region	A.I.S. - 90				Injury Source	Injury Source Confidence Level	Direct/Indirect Injury	Occupant Area Intrusion Number			
		Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity							
										Aspect		
Atlanto-occipital Dislocation	1st	5. <u>2</u>	6. <u>6</u>	7. <u>5</u>	8. <u>02</u>	9. <u>08</u>	10. <u>2</u>	11. <u>6</u>	12. <u>180</u>	13. <u>1</u>	14. <u>1</u>	15. <u>00</u>
Concussion Comatose	2nd	16. <u>2</u>	17. <u>1</u>	18. <u>6</u>	19. <u>08</u>	20. <u>24</u>	21. <u>5</u>	22. <u>0</u>	23. <u>180</u>	24. <u>1</u>	25. <u>2</u>	26. <u>00</u>
Cerebellar edema	3rd	27. <u>3</u>	28. <u>1</u>	29. <u>4</u>	30. <u>04</u>	31. <u>54</u>	32. <u>3</u>	33. <u>6</u>	34. <u>180</u>	35. <u>1</u>	36. <u>2</u>	37. <u>00</u>
Cerebral edema, bilaterally	4th	38. <u>3</u>	39. <u>1</u>	40. <u>4</u>	41. <u>06</u>	42. <u>68</u>	43. <u>3</u>	44. <u>3</u>	45. <u>180</u>	46. <u>1</u>	47. <u>2</u>	48. <u>00</u>
Intraventricular hemorrhage, bilaterally	5th	49. <u>3</u>	50. <u>1</u>	51. <u>4</u>	52. <u>06</u>	53. <u>78</u>	54. <u>4</u>	55. <u>3</u>	56. <u>180</u>	57. <u>1</u>	58. <u>2</u>	59. <u>00</u>
Subarachnoid hemorrhage posteriorly	6th	60. <u>3</u>	61. <u>1</u>	62. <u>4</u>	63. <u>08</u>	64. <u>84</u>	65. <u>3</u>	66. <u>6</u>	67. <u>180</u>	68. <u>1</u>	69. <u>2</u>	70. <u>00</u>
Contusion occipital scalp	7th	71. <u>2</u>	72. <u>1</u>	73. <u>9</u>	74. <u>04</u>	75. <u>02</u>	76. <u>1</u>	77. <u>6</u>	78. <u>104</u>	79. <u>2</u>	80. <u>1</u>	81. <u>00</u>
Abrasion (R) jaw	8th	82. <u>2</u>	83. <u>2</u>	84. <u>9</u>	85. <u>02</u>	86. <u>02</u>	87. <u>1</u>	88. <u>1</u>	89. <u>185</u>	90. <u>2</u>	91. <u>1</u>	92. <u>00</u>
Abrasion whole anterior neck	9th	93. <u>2</u>	94. <u>3</u>	95. <u>9</u>	96. <u>02</u>	97. <u>02</u>	98. <u>1</u>	99. <u>0</u>	100. <u>180</u>	101. <u>1</u>	102. <u>1</u>	103. <u>00</u>
Contusion posterior neck	10th	104. <u>2</u>	105. <u>3</u>	106. <u>9</u>	107. <u>04</u>	108. <u>02</u>	109. <u>1</u>	110. <u>6</u>	111. <u>104</u>	112. <u>2</u>	113. <u>1</u>	114. <u>00</u>

### OCCUPANT INJURY DATA

[illegible]

**OCCUPANT INJURY CLASSIFICATION**

Body Region	Specific Anatomic Structure	Level of Injury	Aspect
(1) Head		Specific injuries are assigned consecutive two-digit numbers beginning with 02.	(1) Right
(2) Face			(2) Left
(3) Neck	<u>Vessels, Nerves, Organs.</u>		(3) Bilateral
(4) Thorax	<u>Bones, Joints</u> are assigned consecutive two digit numbers beginning with 02.		(4) Central
(5) Abdomen			(5) Anterior
(6) Spine		To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.	(6) Posterior
(7) Upper Extremity			(7) Superior
(8) Lower Extremity			(8) Inferior
(9) Unspecified	The exceptions to this rule apply to:		(9) Unknown
			(0) Whole region
<b>Type of Anatomic Structure</b>	<u>Whole Area</u>		
(1) Whole Area	(02) Skin - Abrasion		
(2) Vessels	(04) Skin - Contusion		
(3) Nerves	(06) Skin - Laceration		
(4) Organs (includes Muscles/ligaments)	(08) Skin - Avulsion		
(5) Skeletal (includes joints)	(10) Amputation		
(6) Head - LOC	(20) Burn		
(9) Skin	(30) Crush		
	(40) Degloving		
	(50) Injury - NFS		
	(90) Trauma, other than mechanical		
	<u>Head - LOC</u>		
	(02) Length of LOC		
	(04) Level		
	(06) of		
	(08) Consciousness		
	(10) Concussion		
	<u>Spine</u>		
	(02) Cervical		
	(04) Thoracic		
	(06) Lumbar		
		<b>Abbreviated Injury Scale</b>	
		(1) Minor Injury	
		(2) Moderate Injury	
		(3) Serious Injury	
		(4) Severe Injury	
		(5) Critical Injury	
		(6) Maximum (untreatable)	
		(7) Injured, unknown severity	

SOURCE OF INJURY DATA	INJURY SOURCE CONFIDENCE LEVEL	DIRECT/INDIRECT INJURY
<u>OFFICIAL RECORDS</u>		
(1) Autopsy records with or without hospital/medical records	(1) Certain	(1) Direct contact injury
(2) Hospital/medical records other than emergency room (e.g., discharge summary)	(2) Probable	(2) Indirect contact injury
(3) Emergency room records only (including associated X-rays or other lab reports)	(3) Possible	(3) Noncontact injury
(4) Private physician, walk-in or emergency clinic	(9) Unknown	(7) Injured, unknown source
<u>UNOFFICIAL RECORDS</u>		
(5) Lay coroner report		
(6) E.M.S. personnel		
(7) Interviewee		
(8) Other source (specify): _____		
(9) Police		



Time to Death 25 Hours 23 Minutes (ME)

# OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Air Bag  
(ME)

Restrained?

X No (ME, EN)

— Yes

Blood Alcohol Level  
(mg/dl)

Not Tested  
BAL =  
(ME)

Glasgow Coma  
Scale Score

GCSS = 3  
(NN)

Units of Blood  
Given

Units =

Arterial Blood Gases

pH =

PO<sub>2</sub> =

PCO<sub>2</sub> =

HCO<sub>3</sub> =

Height: 43"

Weight: 45 lbs (ME, NA)

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interview data are unavailable.)

• Marked edema  
of head/face (ME)

• Abrasion (R) jaw  
(ME)

Abrasion (R)

side of neck  
(ME)

Abrasion (L) side  
of neck (ME)

• Depression of  
skull (ME)

• Hyperdense lesions  
within soft tissues  
overlying occipital  
skull bilaterally, larger  
on (L) consistent with  
hematoma (EX4)

• Contusions  
posterior neck  
and skull (ME)

• Extremities without  
lesions, pelvis stable,  
no rectal bleeding, no  
tone (EN)

• Ended up on  
floor under dash  
on passenger side  
(ME, EN, NA)

• Pt transferred to Trauma Center (ED)

# OFFICIAL INJURY DATA — SKELETAL INJURIES

Car struck telephone pole and air bag inflated (EN, NA)

[This description is completely inaccurate — SCI]

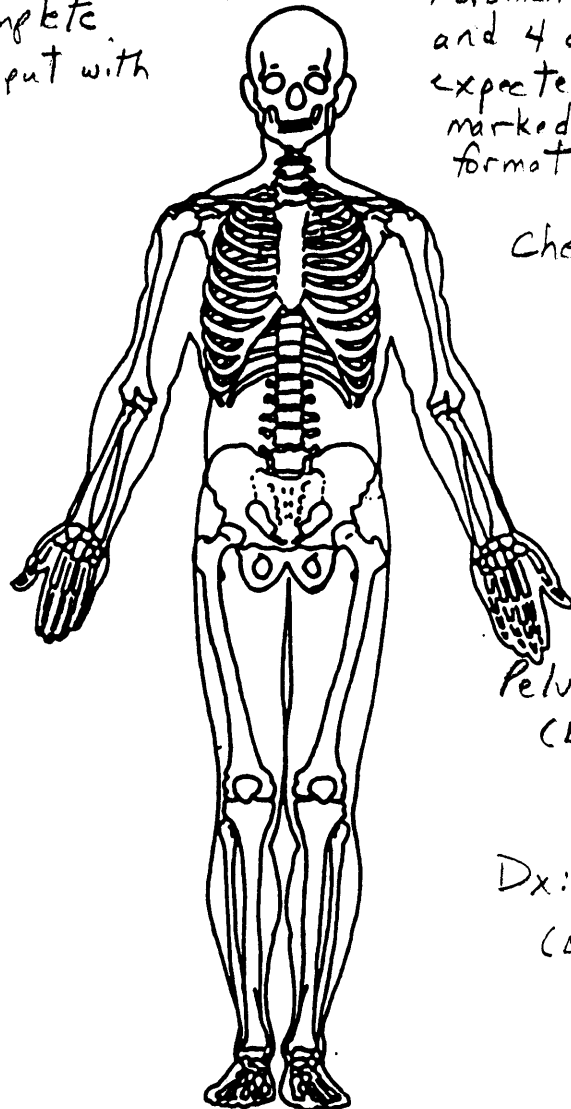
Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

- No skull fracture is identified (EX4)

C-Spine: complete fracture @ occiput with C<sub>1</sub> (ED)

- Atlanto-occipital dislocation: foramen magnum is ~4cm above and 4cm anterior to its expected location, with marked prevertebral hematoma formation (EX3, EX4)

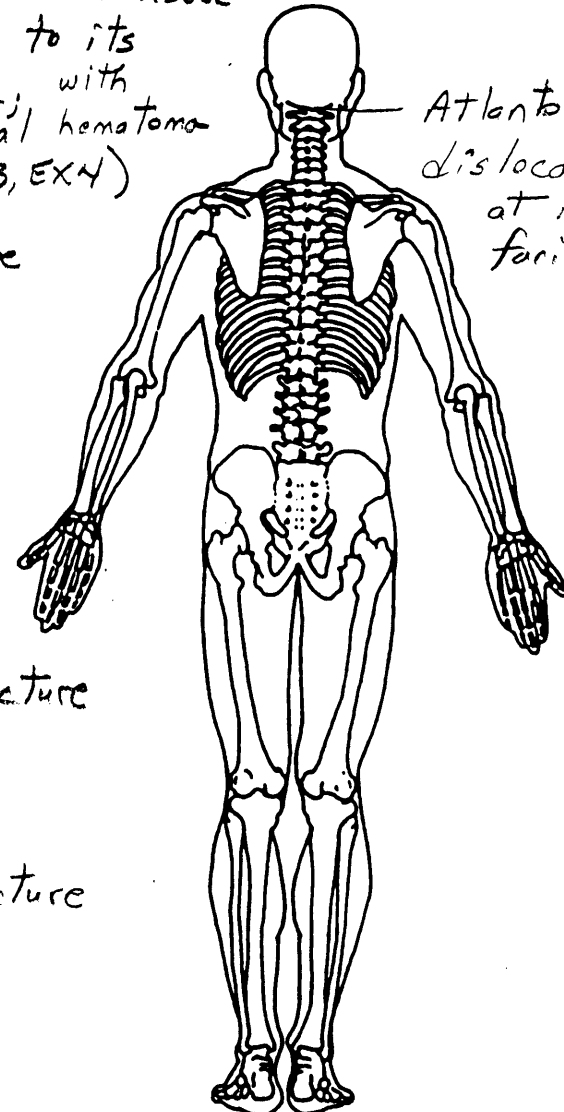
- Head mobile (ME)



Chest: Negative (EX1)

Pelvis: No fracture (EX2)

Dx: Neck Fracture (ED)



Atlanto-occipital dislocation Dx at initial facility (ME)

# INJURY SOURCES

## FRONT

- (001) Windshield
- (002) Mirror
- (003) Sunvisor
- (004) Steering wheel rim
- (005) Steering wheel hub/spoke
- (006) Steering wheel (combination of codes 004 and 005)
- (007) Steering column, transmission selector lever, other attachment
- (008) Cellular telephone or CB radio
- (009) Add on equipment (e.g., tape deck, air conditioner)
- (010) Left instrument panel and below
- (011) Center instrument panel and below
- (012) Right instrument panel and below
- (013) Glove compartment door
- (014) Knee bolster
- (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (017) Windshield reinforced by exterior object (specify):
- (019) Other front object (specify):

## LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests
- (052) Left side hardware or armrest
- (053) Left A (A1/A2)-pillar
- (054) Left B-pillar
- (055) Other left pillar (specify):
- (056) Left side window glass
- (057) Left side window frame
- (058) Left side window sill
- (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (060) Other left side object (specify):

## RIGHT SIDE

- (101) Right side interior surface, excluding hardware or armrests

- (102) Right side hardware or armrest
- (103) Right A (A1/A2)-pillar
- (104) Right B-pillar
- (105) Other right pillar (specify):
- (106) Right side window glass
- (107) Right side window frame
- (108) Right side window sill
- (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (110) Other right side object (specify):

## INTERIOR

- (151) Seat, back support
- (152) Belt restraint webbing/buckle
- (153) Belt restraint B-pillar or door frame attachment point
- (154) Other restraint system component (specify):
- (155) Head restraint system
- (160) Other occupants (specify):
- (161) Interior loose objects
- (162) Child safety seat (specify):
- (163) Other interior object (specify):

## AIR BAG

- (170) Air bag-driver side
- (171) Air bag-driver side and eyewear
- (172) Air bag-driver side and jewelry
- (173) Air bag-driver side and object held
- (174) Air bag-driver side and object in mouth
- (175) Air bag compartment cover-driver side
- (176) Air bag compartment cover-driver side and eyewear
- (177) Air bag compartment cover-driver side and jewelry
- (178) Air bag compartment cover-driver side and object held
- (179) Air bag compartment cover-driver side and object in mouth
- (180) Air bag-passenger side
- (181) Air bag-passenger side and eyewear
- (182) Air bag-passenger side and jewelry

- (183) Air bag-passenger side and object held
- (184) Air bag-passenger side and object in mouth
- (185) Air bag compartment cover-passenger side
- (186) Air bag compartment cover-passenger side and eyewear
- (187) Air bag compartment cover-passenger side and jewelry
- (188) Air bag compartment cover-passenger side and object held
- (189) Air bag compartment cover-passenger side and object in mouth
- (190) Other air bag (specify)
- (195) Other air bag compartment cover (specify)

## ROOF

- (201) Front header
- (202) Rear header
- (203) Roof left side rail
- (204) Roof right side rail
- (205) Roof or convertible top

## FLOOR

- (251) Floor (including toe pan)
- (252) Floor or console mounted transmission lever, including console
- (253) Parking brake handle
- (254) Foot controls including parking brake

## REAR

- (301) Backlight (rear window)
- (302) Backlight storage rack, door, etc.
- (303) Other rear object (specify):

## ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration
- (402) Steering control devices (attached to OEM steering wheel)
- (403) Steering knob attached to steering wheel
- (405) Replacement steering wheel (i.e., reduced diameter)
- (406) Joy stick steering controls
- (407) Wheelchair tie-downs
- (408) Modification to seat belts, (specify):
- (409) Additional or relocated switches, (specify):
- (410) Raised roof

- (411) Wall mounted head rest (used behind wheel chair)
- (412) Other adaptive device (specify):

## EXTERIOR of OCCUPANT'S VEHICLE

- (451) Hood
- (452) Outside hardware (e.g., outside mirror, antenna)
- (453) Other exterior surface or tires (specify):
- (454) Unknown exterior objects

## EXTERIOR OF OTHER MOTOR VEHICLE

- (501) Front bumper
- (502) Hood edge
- (503) Other front of vehicle (specify):
- (504) Hood
- (505) Hood ornament
- (506) Windshield, roof rail, A-pillar
- (507) Side surface
- (508) Side mirrors
- (509) Other side protrusions (specify):
- (510) Rear surface
- (511) Undercarriage
- (512) Tires and wheels
- (513) Other exterior of other motor vehicle (specify):
- (514) Unknown exterior of other motor vehicle

## OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

- (551) Ground
- (598) Other vehicle or object (specify):
- (599) Unknown vehicle or object

## NONCONTACT INJURY

- (601) Fire in vehicle
- (602) Flying glass
- (603) Other noncontact injury source (specify):
- (604) Air bag exhaust gases
- (697) Injured, unknown source

# OFFICIAL INJURY DATA — INTERNAL INJURIES

No Autopsy (ME)

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

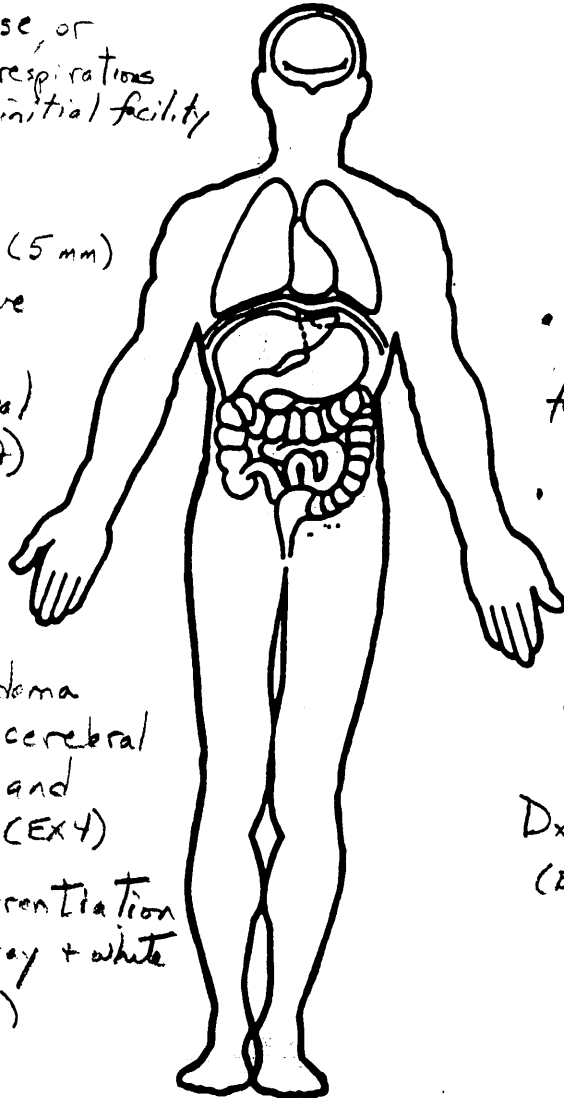
• Pt in full arrest @ scene (EN)

• No BP, pulse, or spontaneous respirations on arrival @ initial facility (EN, NA)

• Pupils fixed (5 mm) + non reactive on arrival @ initial medical facility (NA)

• Diffuse edema throughout cerebral hemispheres and cerebellum (EX4)

• Poor differentiation between gray + white matter (EX4)



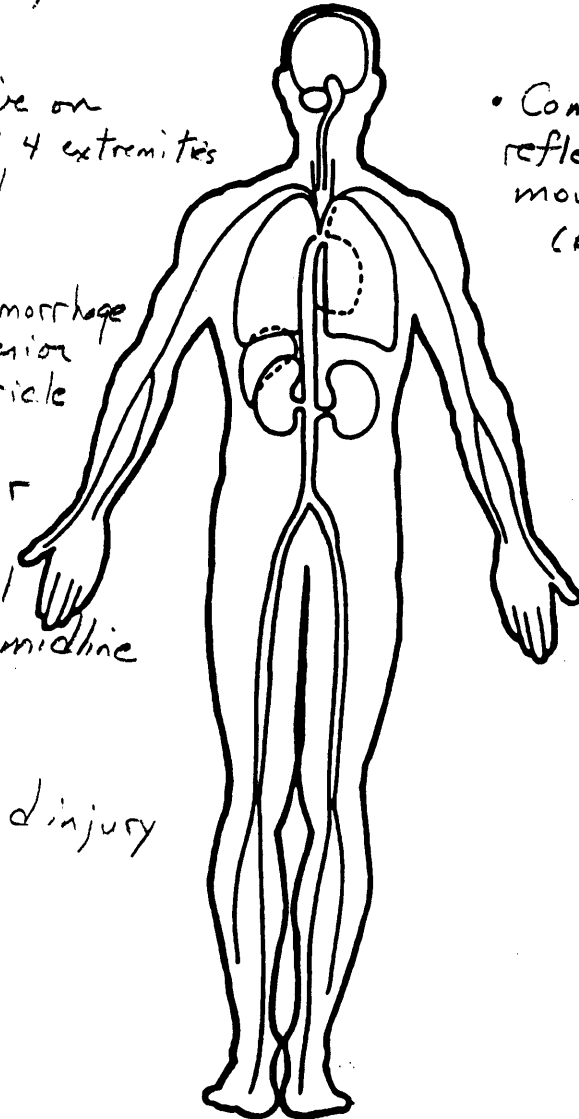
• Pupils fixed + dilated at transfer hospital, no brain stem function (ME)

• Unresponsive on arrival, all 4 extremities were flaccid (NA)

• Subarachnoid hemorrhage in spaces of posterior fossa + 4th ventricle (EX4)

• Intraventricular hemorrhage in posterior lateral ventricles, no midline shift (EX4)

Dx: Probable head injury (ED)



• Comatose, no reflexes, no movement (EN)

## CAUSE OF DEATH

Transected Spinal Cord (ME)

## ICD-9-CM

839.01 Dislocation of first cervical vertebrae  
 430 Subarachnoid hemorrhage  
 431 Intracerebral hemorrhage

## OTHER DRUGS (GV16)

Specimen Test Type	Drug(s)	Drug Type
<input type="checkbox"/> Blood and urine tests <input type="checkbox"/> Blood test only <input type="checkbox"/> Urine test only <input type="checkbox"/> Other test <input type="checkbox"/> Unspecified		

## MEDICAL RECORD ABBREVIATIONS

Symbol	Record Type Description
A	Autopsy—medical information based upon an invasive examination of a body
ME	Medical examiner's record—where the information reported on the patient is based on a non-invasive examination of the body
AR	Admission record/summary—any medical information on this record should be considered as post-ER since it summarizes the patient's admission; these records are common in short hospitalizations and usually only contain: admission DX(s), final DX(s), and a listing of surgical treatments; ICD-9-CM codes are frequently available.
FS	Admission/discharge face sheet—face sheets are essentially the same as admission record/summaries and contain the same types of information as discussed above
DS	Discharge summary—shorten history of a patient's hospitalization highlighting the patient's major injuries; this record is often written from the perspective of its author which in many cases is a consultant
OS	Operative record—summary of a performed surgical operation often providing detailed information about a specific trauma; patients who survive the surgery are normally admitted; thus, this record is normally considered post-ER; however, if this record results from an outpatient surgery, then treat it as emergency-room related
PX	Radiographic records—taken after the patient has been admitted, or while in surgery or intensive care
PN	Patient progress notes—supplemental record containing additional nurses notes taken after the patient's admission
HP	History and physical exam—medical history and the results of the physical exam obtained by the emergency room physician assigned to the patient upon arrival at the emergency room
CN	Consultation record—consultations are in essence additional history and physical exams performed by doctors whose expertise was requested by the emergency room physician; the consultation may occur during the emergency room visit or after admission
ER	Emergency room report—where the author of this information is undefined
EN	Emergency room nurse—"nurse/complaint of" section on the emergency room report
ED	Emergency room doctor—"objective/physical exam" section plus "diagnosis and treatment" sections (i.e., doctor portion of emergency room report)
NN	Nurse notes—supplemental record containing additional notes taken by the emergency room nurse(s)
EX	Radiographic records—taken during the patients stay in the emergency room
CV	Coroner's verdict—statement of cause of death for legal specific regarding injuries; care must be exercised to ascertain the credentials of the verdict's author.
CR	Coroner's report—medical information based upon a noninvasive examination performed by a person who is not a doctor but who has the title of a coroner
ET	Emergency medical technician—report by a person who qualifies as an emergency medical services technician (EMS or EMT)
O	Other source—medical information based on an other source (e.g., newspaper, DVM—Doctor of Veterinary Medicine)
NA	Nursing Assessment



**MEDICAL RECORDS**  
**FROM**  
**INITIAL TREATMENT FACILITY**

PATIENT NAME AND ADDRESS [REDACTED] NC [REDACTED]				DATE OF BIRTH [REDACTED] 92	SMOKING N	LIVING WILL N	AGE 41	SEX F	RACE NA	M/S M	P/T	MEDICAL RECORD NO [REDACTED]
[REDACTED] NC [REDACTED] COUNTY				SOC. SEC. NO [REDACTED]	TIME OF REG. 1213		DATE OF REGIS. [REDACTED] 96		REGIS. BY [REDACTED]	ACCOUNT NO [REDACTED]		
[REDACTED]				ORGAN DONOR? N	EIDC FT	ESC NA	F/C MCD	S/C ED	ER PHYSICIAN [REDACTED]			
PATIENT STATED COMPLAINT MVA FULL ARREST				OCCURRENCE CODE ACA		DATE [REDACTED] 96		TIME		ATTENDING PHYSICIAN		
PATIENT'S MAIDEN NAME				NAME OF SPOUSE		FATHER'S NAME [REDACTED]		FAMILY PHYSICIAN				
MOTHER'S MAIDEN NAME				PREVIOUS X-RAY HERE: N		DATE OF BIRTH OF POLICY HOLDER		EXPIRATION DATE OF INSURANCE [REDACTED]				
PERSON TO NOTIFY IN CASE OF EMERGENCY/RELATION MOTHER DAY PHONE NIGHT PHONE [REDACTED]				PATIENT'S EMPLOYER NON-APPLICABLE		ADDRESS LOCATION PHONE		IMMUNIZATIONS CURRENT? Y				
RESPONSIBLE PARTY NAME AND ADDRESS [REDACTED] NC [REDACTED]				RESPONSIBLE PARTY SOC. SEC. NO./PHONE [REDACTED]		REL: D EIDC PT Esc NA		RESP. PARTY'S EMPLOYER NAME/ADDRESS UNEMPLOYED				
INSURANCE COMPANY [REDACTED]		PLAN CODE	COMPANY CODE	POLICY HOLDER [REDACTED]		REL	POLICY/CERTIFICATE NO. [REDACTED]		GROUP NO.		VER	
TIME SEEN BY PHYS.	ALLERGIES			WEIGHT	TIME	TEMP	PULSE	RESP	BP			
HISTORY AND EXAMINATION 4 yohiop f. in T-bone MVA this am. Car struck telephone pole + air bag inflated pt not restrained + found on floor. Pt pr in full arrest at scene. Transported e CPR ongoing + full spine protocol. <sup>in-line manual stabilization</sup> o: BP + pulse absent, no spon resp. - pt intubated e 5.5 ETT tube, good equal full BS. Pupils born + fixed, Ert benign x some blood around lips, Neck in collar, Chest clear, CV-no sounds, no periph. pulses. Abd soft, non-tender Ext 3 lesions, Pelvis stable, Rectal hem(-) - no tone, Ext 3 obvious lesions, Neuro: comatose, no reflexes, no move- ment. Pt resuscitated e IV Epi e good femoral TREATMENT Solu-Medrol 100mg over 1 hr + then 110mg / hr IV drip NaHCO3 40mEq IV IV fluids @ 60ml/hr total Dopamine 1 to 16mg/min. NS bolus 200cc, then continue reg fluids Epi drip 13mg/100cc, start at 3u/hr pulse. C-spine e complete fx at occiput e C, Pt placed on dopamine for Bf control Neck. Ex. Probable head injury GROSS HER INSTRUCTIONS To [REDACTED] - PRS [REDACTED]												
CONDITION ON DISCHARGE: GOOD FAIR POOR- DISCHARGE STATUS HOME ADMITTED TRANS OTHER EXPIRED HOLDING RECALL (10)				AMA		LAB/X-RAY TIME RESULTS Urinalysis 427.5 CBC X 839.01 Panel 7 431 CARDIAC PROFILE 430 Amylase 285.1 X-Rays: CHEST EXTREMITY 96.04 SPINE 96.71 SHOULDER 31500 PELVIS 94656 IVP CTR clear R.T. EKG PELVIS fx ABG repeat 5 OTHER TIME DISCHARGED						
E ATTACHED INSTRUCTIONS FOR: <input type="checkbox"/> Wound Care <input type="checkbox"/> Virus Infection <input type="checkbox"/> Head Injury <input type="checkbox"/> Fracture <input type="checkbox"/> Soft Tissue Fracture <input type="checkbox"/> Blunt Injury <input type="checkbox"/> Neck Injury <input type="checkbox"/> Chest Injury <input type="checkbox"/> Abdominal Injury <input type="checkbox"/> Extremity Injury <input type="checkbox"/> Glands <input type="checkbox"/> Skin Treatment				ATT. PHYSICIAN'S SIGNATURE [REDACTED]								

Handwritten score 2

TRIAGE CATEGORY \_\_\_\_\_

ADULT SCORE 2 TRIAGE/INITIAL ASSESSMENT		FAMILY PHYSICIAN		TEMP 96.5	PULSE 0	RESP 1	BP 100/60
COMPLAINT/HX PRESENT CONDITION: (DATE/TIME 1206) Received in full arrest & CPR in progress involved in MVA - positive front end passenger - from in floor board. Not a telephone pole, all bags inflated. Spine could not be checked.				WEIGHT: 45 <input type="checkbox"/> N/A 45 LBS			
DIABETIC: <input type="checkbox"/> YES SIGNIFICANT MEDICAL HX: Asthma, Pneumonia				LAST TETANUS: <input type="checkbox"/> N/A Undine DATE			
<input checked="" type="checkbox"/> NKA ALLERGIES:				GYN PREGNANT: <input type="checkbox"/> DENIES <input checked="" type="checkbox"/> N/A <input type="checkbox"/> YES <input type="checkbox"/> UNKNOWN			
<input type="checkbox"/> N/A TRIAGE NURSE INTERVENTION: Refer to code sheet for meds.				LMP: BCP <input type="checkbox"/>			
NAME		DOSAGE/FREQ		NAME		DOSAGE/FREQ	
EMOTIONAL STATE <input type="checkbox"/> COOPERATIVE <input type="checkbox"/> ANXIOUS <input type="checkbox"/> CRYING <input type="checkbox"/> HYSTERICAL <input type="checkbox"/> DEPRESSED				INFORMATION SOURCE <input type="checkbox"/> PATIENT <input type="checkbox"/> FAMILY MEMBER: <input type="checkbox"/> FRIEND/CO-WORKER <input checked="" type="checkbox"/> RESCUE PERSONNEL			
<input type="checkbox"/> UNCOOPERATIVE <input type="checkbox"/> SMELL OF ETOH <input type="checkbox"/> HOSTILE <input type="checkbox"/> COMBATIVE <input type="checkbox"/> OTHER:				MODE OF ARRIVAL <input type="checkbox"/> AMBULATORY <input checked="" type="checkbox"/> AMBULANCE <input type="checkbox"/> W/C <input type="checkbox"/> CARRIED <input type="checkbox"/> STRETCHER <input type="checkbox"/> POLICE			
TRIAGE/INITIAL ASSESSMENT NURSE SIGNATURE				TRIAGE/INITIAL ASSESSMENT NURSE SIGNATURE			

## NURSING ASSESSMENT

PRE-HOSPITAL INTERVENTION: IV <input type="checkbox"/> CPR <input checked="" type="checkbox"/> C-COLLAR <input type="checkbox"/> BACK BOARD <input type="checkbox"/> SAND BAG <input type="checkbox"/> SPLINTS <input type="checkbox"/> <u>O<sub>2</sub></u>	
LACERATION/PUNCTURE LOCATION/SIZE/BLEEDING: <u>None noted</u>	
MECHANISM OF INJURY: _____ TIME OF INJURY: _____	
EENT DURATION: _____ SYMPTOMS: _____ SORE THROAT x _____ DAYS EARACHE; L R; x _____ DAYS	
MECHANISM OF INJURY: <u>MVA - No driving, held today</u> NOSE EPISTAXIS: _____ PAIN: _____	
RESPIRATORY <input type="checkbox"/> SPONTANEOUS/NORMAL <input type="checkbox"/> SOB <input type="checkbox"/> LABORED <input type="checkbox"/> SHALLOW <input checked="" type="checkbox"/> ASSISTED: <u>#1 tube</u> <input type="checkbox"/> PRODUCTIVE COUGH:	
CHEST SOUNDS <input type="checkbox"/> CLEAR <input type="checkbox"/> WHEEZING <input type="checkbox"/> RALES <input type="checkbox"/> OTHER: _____	
ORTHOPEDIC LOCATION: _____ MECHANISM OF INJURY: _____	
ROM: <input type="checkbox"/> FULL <input type="checkbox"/> PAINFUL <input type="checkbox"/> ABSENT <input type="checkbox"/> LIMITED SKIN TEMP. DISTAL TO INJURY: _____	
DISTAL PULSE: <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> SWELLING <input type="checkbox"/> DEFORMITY <input type="checkbox"/> TENDERNESS <input type="checkbox"/> BRUISING <input type="checkbox"/> ABRASING <input type="checkbox"/> OPEN WOUND: _____	
GASTROINTESTINAL <input type="checkbox"/> NAUSEA <input type="checkbox"/> VOMITING <input type="checkbox"/> DIARRHEA <input type="checkbox"/> CONSTIPATION <input type="checkbox"/> RECTAL BLEEDING: _____	
ABD: <input checked="" type="checkbox"/> SOFT <input type="checkbox"/> FLAT <input type="checkbox"/> TENDER <input type="checkbox"/> OBESSE <input type="checkbox"/> TAUT <input type="checkbox"/> DISTENDED <input type="checkbox"/> INJURIES: _____	
PAIN, LOCATION/CHARACTER/ONSET: _____	
BOWEL SOUNDS: <input type="checkbox"/> NORMAL <input type="checkbox"/> HYPERACTIVE <input type="checkbox"/> HYPOACTIVE <input checked="" type="checkbox"/> ABSENT LAST BM: _____	
DIET FOR AGE: _____ # BOTTLES _____	
SOLIDS _____	
FLUID INTAKE: _____	
<input type="checkbox"/> POOR <input type="checkbox"/> FAIR <input type="checkbox"/> GOOD	
CARDIOVASCULAR <input type="checkbox"/> CHEST PAIN: PT'S SEVERITY RATING (1-10): _____ LOCATION/TYPE/ONSET: _____	
<input type="checkbox"/> SOB <input type="checkbox"/> NAUSEA/VOMITING <input type="checkbox"/> DIAPHORETIC	
<input checked="" type="checkbox"/> CARDIAC RHYTHM (monitor) <u>Asystole on arrival</u>	
SKIN <input type="checkbox"/> NORMAL COLOR/TEMP/CONDITION <input type="checkbox"/> PALE <input type="checkbox"/> FLUSHED <input checked="" type="checkbox"/> CYANOTIC <input type="checkbox"/> JAUNDICED <input type="checkbox"/> HOT <input checked="" type="checkbox"/> COOL <input type="checkbox"/> COLD	
<input type="checkbox"/> POOR TURGOR <input type="checkbox"/> RASH: _____ OTHER: _____	
VISUAL ACUITY L: _____ R: _____ ( <input type="checkbox"/> CORRECTIVE LENS ) <input type="checkbox"/> PERL <input type="checkbox"/> UNABLE TO ACCESS: _____ BLIND: <input type="checkbox"/> L <input type="checkbox"/> R	
MECHANISM OF INJURY: _____ <input type="checkbox"/> PAIN <input type="checkbox"/> BLURRING <input type="checkbox"/> PHOTSENSITIVE	
URINARY <input type="checkbox"/> DYSURIA <input type="checkbox"/> BURNING <input type="checkbox"/> URGENCY <input type="checkbox"/> FREQUENCY <input type="checkbox"/> HEMATURIA <input type="checkbox"/> INCONTINENT <input type="checkbox"/> DIAPERS USED x _____ 24 HRS.	
<input type="checkbox"/> INDWELLING CATHETER: _____ OTHER: _____	
REPRODUCTIVE <input type="checkbox"/> DISCHARGE, VAGINAL/PENILE: _____ PAIN: _____	
<input type="checkbox"/> BLEEDING _____ PAD/HR. <input type="checkbox"/> EDC: _____ G _____ P _____ Ab _____ FHT: _____	
HEADACHE ONSET: _____ PT'S SEVERITY RATING (1-10): _____ HISTORY OF SAME: _____	
<input type="checkbox"/> PHOTSENSITIVITY <input type="checkbox"/> BLURRED VISION <input type="checkbox"/> NAUSEA <input type="checkbox"/> VOMITING <input type="checkbox"/> OTHER: _____	
HEAD/NEUROLOGICAL <input type="checkbox"/> A & O <input type="checkbox"/> DISORIENTED/CONFUSED <input type="checkbox"/> RESPONDS TO PAIN <input type="checkbox"/> RESPONDS TO VOICE <input checked="" type="checkbox"/> UNRESPONSIVE	
EXTREMITIES: <u>RUE</u> <u>LUE</u> <u>RLE</u> <u>LLE</u> (S= Strong, W= Weak, F= Flaccid, P= Purposeful, NP= Non-Purposeful, DT= Decorticate, DB= Decerebrate)	
PUPIL REACTION: <u>RNLR</u> (B=Blink, Sl=Sluggish, NR=Non-Responsive)	
<input type="checkbox"/> FONTANELS <input type="checkbox"/> UNABLE TO ASSESS PUPILS: _____	
<input type="checkbox"/> CRYING <input type="checkbox"/> SEIZURE ACTIVITY x _____ MINUTES	
PUPIL SIZE: <u>5</u> mm R <u>5</u> mm L	
SAFETY <input type="checkbox"/> SIDERAILS x 2 <input type="checkbox"/> CALL BELL PROVIDED <input checked="" type="checkbox"/> ADULT ATTENDED: <u>ED Staff</u>	
DISCHARGE TIME: _____	

EMERGENCY DEPARTMENT  
PATIENT PROGRESS RECORD / NURSING NOTES

PATIENT: [REDACTED]

ALLERGIES: ALLER

PHYSICIAN: \_\_\_\_\_

EMERGENCY ROOM: Date: 1/96

Time	B/P	Pulse	Resp.	Temp.	I & O	Observation/Remarks	Medication & Treat.	Int.
1206	0	0	0	46.5		Monitor	Acetate CPR in progress	BT
1208						Pharmacy recording med - N 5 1000cc #22 A - Lt lower arm		
1210						#5 ET tube inserted by Dr. E/Sonny		
1210						CPR continued - Acetate		
1215						HR Rate 175, Sinus tach		
						Portable chest x-ray, pelvic x-ray done		BT
						Monitor cont - Sinus tach rate 151		BT
1216						[REDACTED] in		
1245	0	168	32 bagged					
1255	0	135	32 bagged			Remains unable to obtain BP. Tracheal		
						Pulse palpable		
1305						Bicarb 40meq IV		CH
1315	0	132				Placed on ventilator per R.T.		
						Settings 350V, rate 20, 100% FIO2		
						Pressure ↑ to 16meq/min		
1325	0	158	vent			Removal pulse palpable NS 500cc		
						Wm W foot c 22me @ 30c/hr		
						Skin <del>not</del> mottled		
1330	0	161	vent			Epi 2cc IV. 60meq Succinylcholine		
						in 50cc NS to infuse over		
						1hr. WBB		CH
1337						ECT scan via stretcher. Continues		
						to be in FSP. Transferred via backboard		
						FSP = Full spinal precautions		

Initials	Signature & Title	Initials	Signature & Title
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

TOTAL OUTPUT:	CC'S	URINE	SUCTION:	VOMITUS:	TOTAL INTAKE:	CC'S	IV:	ORAL:
DISPOSITION:	HOME	ADMIT	TRANSFER TO:	BY:	OFFICE	OTHER		
VALUABLES:	TO PATIENT	FLOOR	FAMILY	OTHER:				
REPORT GIVEN TO:		BY:		IN PERSON	PHONE			
FLOOR CALLED @:		PATIENT TO FLOOR @:		ADMITTED:				
NURSE'S SIGNATURE		DATE	1/96	TIME:				

EMERGENCY DEPARTMENT  
PATIENT PROGRESS RECORD / NURSING NOTES

PATIENT: \_\_\_\_\_

PHYSICIAN: \_\_\_\_\_

ALLERGIES: \_\_\_\_\_

EMERGENCY ROOM: Date: \_\_\_\_\_

Time	B/P	Pulse	Resp.	Temp.	I & O	Observation/Remarks	Medication & Treat.	Int.
1350						Returned from CT via Stretcher		
1355						Dopamine D12. Epi drip @ 13mg in 100cc D5W @ 30cc/hr.		
						IN 13mg/ml.		
1357	0	130	Vent			Radial pulse remains palp.		
						Unable to obtain BP on Brachial		
						Pulse. For transfer to _____		
						via Helicopter. Remains unresponsive.		
1405	0	128	vent			Carolina Air Care Here. Mother in.		
1415	0	124	vent			IV's patent. F&S intact. ET tube		
						intact. Foley intact. Patient		
						Remains unresponsive. Pupils		
						fixed and dilated @ 5mm. Trauma		
						Score 3. Epi drip @ 4cc/hr.		
						Vent intact		

Initials	Signature & Title	Initials	Signature & Title

TOTAL OUTPUT: 20	CC'S	URINE	SUCTION:	VOMITUS:	TOTAL INTAKE:	CC'S	IV: 8.5cc	ORAL:
DISPOSITION:	HOME	ADMIT	✓ TRANSFER TO	BY	OFFICE	OTHER		
VALUABLES:	TO PATIENT	FLOOR	✓ FAMILY	OTHER:				
REPORT GIVEN TO:		BY:		IN PERSON	PHONE			
FLOOR CALLED:	Kristen	PATIENT TO FLOOR:		ADMITTED:				
NURSE'S SIGNATURE:		DATE:		TIME:	1430			



NAME: [REDACTED]  
PHYS: [REDACTED]  
DOB: [REDACTED] /92 AGE: 4Y 1M SEX: F  
ACCT: [REDACTED] LOCATION: ED  
EXAM DATE: [REDACTED] /96 STATUS: ER  
RADIOLOGY NO: [REDACTED]  
UNIT NO: [REDACTED]

EXAMS: [REDACTED] RAD CHEST SINGLE VIEW FRONTAL

PORTABLE CHEST - AP SUPINE AT 1220 ON [REDACTED] 96  
BACKBOARD ARTIFACT IS PRESENT.

An ET tube is seen terminating 2 cm. above the carina in satisfactory position. The lungs appear clear and well aerated. The heart, vasculature, and mediastinum were unremarkable. There is a moderate amount of gas within the stomach.

IMPRESSION: SATISFACTORY ET TUBE PLACEMENT OTHERWISE NEGATIVE CHEST.

\*\* REPORT SIGNATURE ON FILE [REDACTED] /96 \*\*  
REPORTED AND SIGNED BY: [REDACTED] MD

CC: [REDACTED]

TECHNOLOGIST: [REDACTED]  
TRANSCRIBED DATE/TIME: [REDACTED] /96 (1323)  
TRANSCRIPTIONIST: [REDACTED]  
PRINTED DATE/TIME: [REDACTED] /96 (1331) BATCH NO: [REDACTED]

NAME: [REDACTED]  
PHYS: [REDACTED]  
DOB: [REDACTED]/92 AGE: 4Y 1M SEX: F  
ACCT: [REDACTED] LOCATION: ED  
EXAM DATE: [REDACTED]/96 STATUS: ER  
RADIOLOGY NO: [REDACTED]  
UNIT NO: [REDACTED]

EXAMS: [REDACTED] RAD PELVIS AP

PORTABLE PELVIS  
AP SUPINE AT 1220 ON [REDACTED]-96.

The film is over exposed. There is backboard artifact. Both hips are normally located. No fracture is seen. There is a moderate amount of bowel gas scattered throughout the abdomen without evidence of mass effect.

IMPRESSION: LIMITED STUDY. NO ABNORMALITY SEEN.

\*\* REPORT SIGNATURE ON FILE [REDACTED]/96 \*\*  
REPORTED AND SIGNED BY: [REDACTED] MD

CC: [REDACTED]

TECHNOLOGIST: [REDACTED]  
TRANSCRIBED DATE/TIME: [REDACTED]/96 (1325)  
TRANSCRIPTIONIST: [REDACTED]  
PRINTED DATE/TIME: [REDACTED]/96 (1331) BATCH NO: [REDACTED]

NAME: [REDACTED]  
PHYS: [REDACTED]  
DOB: [REDACTED]/92 AGE: 4Y 1M SEX: F  
ACCT: [REDACTED] LOCATION: ED  
EXAM DATE: [REDACTED]/96 STATUS: ER  
RADIOLOGY NO: [REDACTED]  
UNIT NO: [REDACTED]

EXAMS: [REDACTED] RAD SPINE CERVICAL AP & LATERA

CROSS TABLE LATERAL CERVICAL SPINE AT 1220 ON [REDACTED] 96.

There is anterior atlanto-occipital dislocation with the foramen magnum located approximately 4 cm. above and 4 cm. anterior to its expected location. The atlas remains associated with C2 and the remainder of the spine appears intact and normally aligned. There is marked prevertebral soft tissue swelling with anterior displacement of an indwelling endotracheal tube.

IMPRESSION: ANTERIOR ATLANTO-OCCIPITAL DISLOCATION WITH MARKED PREVERTEBRAL HEMATOMA FORMATION.

\*\* REPORT SIGNATURE ON FILE [REDACTED]/96 \*\*  
REPORTED AND SIGNED BY: [REDACTED] MD

CC: [REDACTED]

TECHNOLOGIST: [REDACTED]  
TRANSCRIBED DATE/TIME: [REDACTED] 96 (1359)  
TRANSCRIPTIONIST: [REDACTED]  
PRINTED DATE/TIME: [REDACTED] 96 (1359) BATCH NO: [REDACTED]

NAME: [REDACTED]  
PHYS: [REDACTED]  
DOB: [REDACTED]/92 AGE: 4Y 1M SEX: F  
ACCT: [REDACTED] LOCATION: ED  
EXAM DATE: [REDACTED]/96 STATUS: ER  
RADIOLOGY NO: [REDACTED]  
UNIT NO: [REDACTED]

EXAMS: [REDACTED] CT HEAD W/O CONTRAST

CT OF THE HEAD - UNENHANCED

Contiguous 8 axial scans were obtained from the foramen magnum to the vertex with 5 mm. collimation. Bone and brain windows were reviewed.

FINDINGS - the scout view demonstrates anterior atlanto-occipital dislocation. There is approximately 3 cm. of separation from the foramen magnum to C1. There is hyperdensity in the subarachnoid spaces of the posterior fossa including the 4th ventricle consistent with subarachnoid hemorrhage. There is diffuse low density throughout the visualized brain including the cerebral hemispheres and cerebellum consistent with diffuse edema. There is very poor differentiation between the gray and the white matter. There is some hyperdense material within the posterior lateral ventricles which probably represents extension of subarachnoid hemorrhage into the ventricular system. The midline is not shifted. Hyperdense lesions are seen within the soft tissues overlying the occipital skull bilaterally, larger on the left consistent with occipital hematomas. There is partial opacification of the left maxillary antrum and the ethmoid air cells. No skull fracture is identified.

IMPRESSION: ANTERIOR ATLANTO-OCCIPITAL DISLOCATION WITH ASSOCIATED GENERALIZED CEREBRAL EDEMA AND SUBARACHNOID HEMORRHAGE AND INTRA VENTRICULAR HEMORRHAGE.

\*\* REPORT SIGNATURE ON FILE [REDACTED]/96 \*\*  
REPORTED AND SIGNED BY: [REDACTED]

CC: [REDACTED]

TECHNOLOGIST: [REDACTED]  
TRANSCRIBED DATE/TIME: [REDACTED]/96 (1435)  
TRANSCRIPTIONIST: [REDACTED]  
PRINTED DATE/TIME: [REDACTED]/96 (1541) BATCH NO: [REDACTED]

**MEDICAL EXAMINER'S REPORT**



## REPORT OF INVESTIGATION BY MEDICAL EXAMINER

OCME USE ONLY  
[REDACTED]  
Case number  
[REDACTED] 1996  
Date received  
☐ Res ☐ NR

DECEDENT: \_\_\_\_\_  
 First Middle Last Suffix

RESIDENCE: \_\_\_\_\_  
 Number and Street City, State County

AGE: 4 SEX: ☐ Male ☒ Female ☐ Unknown

RACE: ☐ Black ☐ Native American ☐ Oriental ☐ White ☐ Unknown

HISPANIC ORIGIN: ☒ Yes ☐ No ☐ Unknown

## INFORMATION ABOUT OCCURRENCE

	DATE	TIME	ADDRESS OR FACILITY	COUNTY
ONSET OF INJURY OR ILLNESS	[REDACTED] 96	11:42 A	[REDACTED] NC	[REDACTED]
DEATH	[REDACTED] 96	1:05 P	[REDACTED]	[REDACTED]
VIEW OF BODY	[REDACTED] 96	11:00 A	<input type="checkbox"/> Scene of death <input checked="" type="checkbox"/> Hospital <input type="checkbox"/> Funeral home <input type="checkbox"/> Other _____ <input type="checkbox"/> Not viewed	
M.E. NOTIFIED	[REDACTED] 96	3:00 P	LAW ENFORCEMENT AGENCY: [REDACTED] Police Dept.	
LAST KNOWN TO BE ALIVE	[REDACTED] 96		OFFICER: Sgt [REDACTED] TELEPHONE: [REDACTED] Death occurred while in custody: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown	

AUTOPSY: ☒ None ☐ M.E. Authorized ☐ Non-M.E. Autopsy facility: \_\_\_\_\_  
 BLOOD SAMPLE: ☐ Mailed ☐ Obtained by pathologist ☒ Reason not obtained: NA  
 IF CLINICAL ALCOHOL DONE, RESULT: \_\_\_\_\_ By whom: \_\_\_\_\_

PROBABLE CAUSE OF DEATH: ☐ Pending

1. transected ~~vert~~ spiral cord  
DUE TO
2. motor vehicle accident  
DUE TO
3. \_\_\_\_\_  
DUE TO
4. \_\_\_\_\_

### CONTRIBUTING CONDITIONS

**MANNER OF DEATH:**

☐ Natural ☒ Accident ☐ Homicide ☐ Suicide ☐ Pending

OCME REVIEW		SDC
1.	_____	<input type="checkbox"/> None <input type="checkbox"/> AL <input type="checkbox"/> Dictated <input type="checkbox"/> COG
DUE TO		
2.	_____	
DUE TO		
3.	_____	
DUE TO		
4.	_____	
<p style="text-align: center; margin: 0;"><b>CONTRIBUTING CONDITIONS</b></p> <p style="margin: 0;"> <input type="checkbox"/> Natural             <input type="checkbox"/> Accident             <input type="checkbox"/> Homicide             <input type="checkbox"/> Suicide             <input type="checkbox"/> Undetermined         </p> <p style="margin: 0;">           Reviewer: _____ Date: _____         </p> <p style="margin: 0; font-size: small;">Information in this block supersedes that contained in space at left.</p>		

I hereby certify that after receiving notice of the death described herein I took charge of the body and made inquiries regarding the cause of death in accordance with Article 16 of Chapter 130A of the N.C. General Statutes and the information contained herein regarding such death is true and correct to the best of my knowledge and belief.

## MEDICAL HISTORY

☐ Alcoholism    ☐ Diabetes    ☐ IV drug abuse    ☐ Ischemic heart disease    ☐ Smoking  
☐ Seizure disorder    ☐ Cancer    ☐ Hypertension    ☐ Depression    ☐ HIV/AIDS  
☐ Other asthma    Attending Physician \_\_\_\_\_ City \_\_\_\_\_

## MEANS OF DEATH

☒ VEHICLE: Type of vehicle associated with this decedent:  
☒ Passenger car    ☐ Pickup truck    ☐ Truck--more than 2 axles    ☐ Motorcycle  
☐ Bicycle    ☐ Farm vehicle    ☐ ATV    ☐ Moped    ☐ Other \_\_\_\_\_  
Position: ☐ Driver    ☒ Passenger    ☐ Pedestrian    ☐ Unknown  
Devices: ☐ Seat restraints    ☒ Air bag    ☐ Helmet    ☐ Child restraint    ☐ None    ☐ Unknown  
Number of vehicles involved 2  
☐ GUN: ☐ Rifle--Caliber \_\_\_\_\_    ☐ Handgun--Caliber \_\_\_\_\_    ☐ Shotgun--Gauge \_\_\_\_\_  
☐ Other \_\_\_\_\_    ☐ Unknown  
☐ INSTRUMENT: ☐ Blunt    ☐ Sharp    Description: \_\_\_\_\_  
☐ TOXIC AGENT(S) SUSPECTED: ☐ Alcohol    ☐ Others \_\_\_\_\_  
☐ DROWNING: ☐ Pond    ☐ Lake or river    ☐ Ocean    ☐ Pool    ☐ Bathtub    ☐ Other \_\_\_\_\_  
Life preserver: ☐ Yes    ☐ No    ☐ Unknown    Able to swim: ☐ Yes    ☐ No    ☐ Unknown  
Activity \_\_\_\_\_  
☐ FIRE: Suspected cause \_\_\_\_\_    Smoke detector: ☐ Yes    ☐ No    ☐ Unknown  
☐ FALL: From \_\_\_\_\_ to \_\_\_\_\_    Approximate distance \_\_\_\_\_ feet

## ACTIVITY OF DECEDENT AND PREMISES

FATAL INJURY OR ILLNESS: Activity riding in car  
Type of place street    Specific location St. \_\_\_\_\_

Fatal injury or illness occurred on a job: ☐ Yes    ☒ No    ☐ Unknown

If yes, was employment: ☐ Primary job    ☐ Secondary    ☐ Volunteer work    ☐ Unknown

Name of this employing firm or agency \_\_\_\_\_

Type of business or industry \_\_\_\_\_    Decedent's occupation \_\_\_\_\_

DEATH: Type of place \_\_\_\_\_    Specific location \_\_\_\_\_

### Examples:

Activity: Running, lifting hay bales, eating, typing letter, driving commercial truck, sleeping, bathing, watching television, fighting, etc.

Type of place: House, apartment, trailer, school, jail, bar or tavern, hotel, restaurant, store, street, hospital, farm, highway, factory, etc.

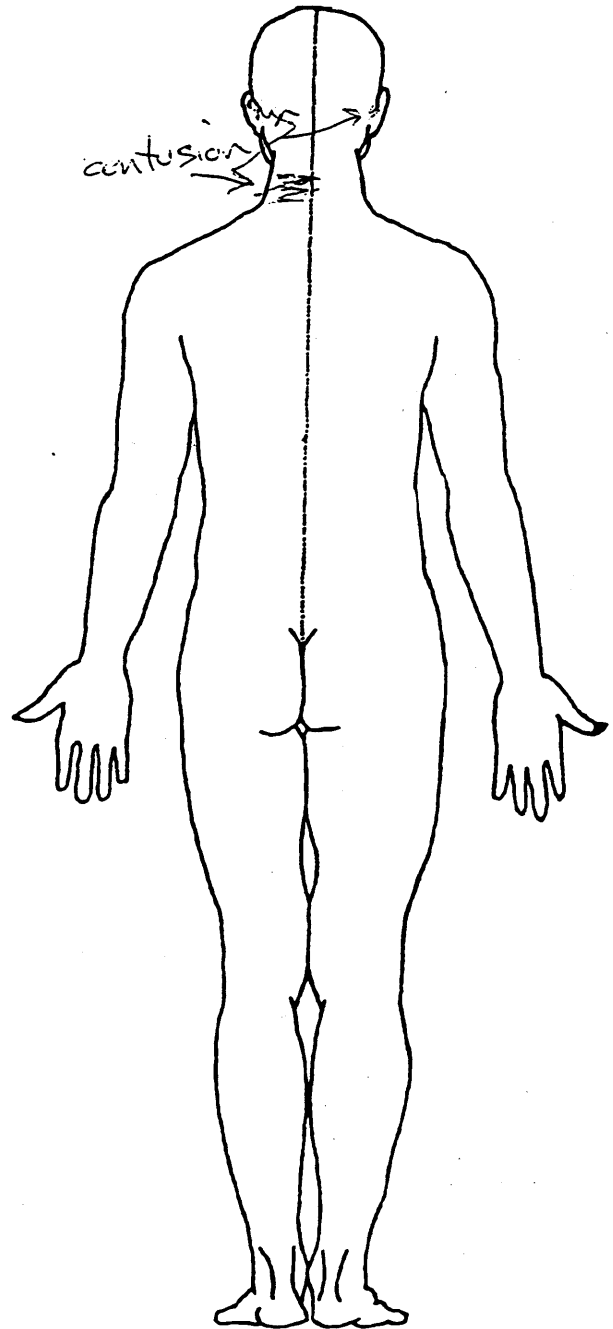
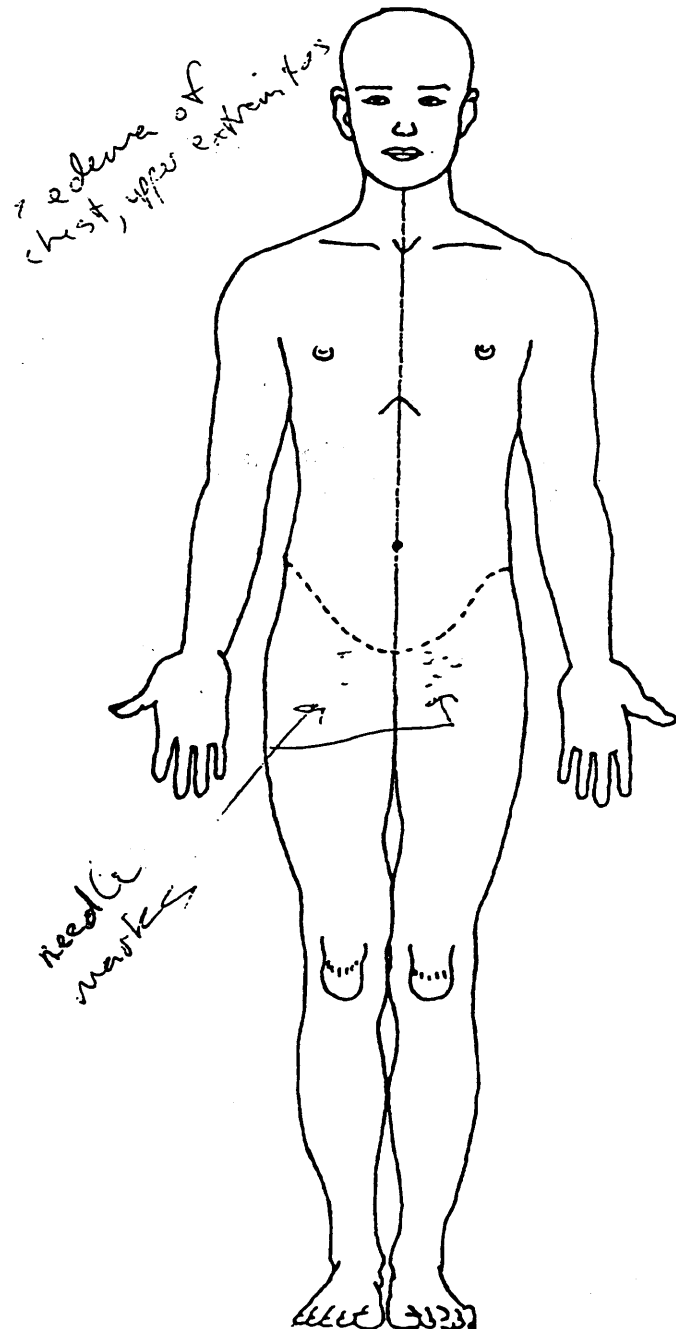
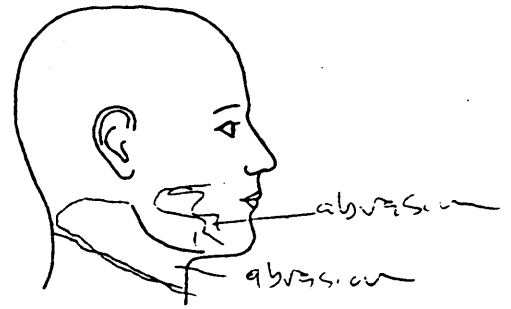
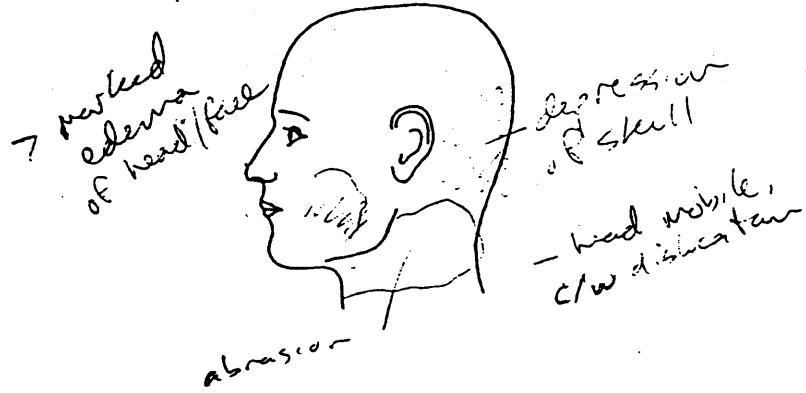
Specific location: Bathroom, assembly line, kitchen, front yard, office, parking lot, emergency room, roadside, ambulance, car, etc.

On a job: Any activity that is income generating regardless of age of decedent including farming or part time work; also include non-income generating volunteer or charity work.

## DESCRIPTION OF BODY

CONDITION: ☒ Intact    ☐ Decomposition    ☐ Skeletonized  
☐ Embalmed    ☐ Charred    ☐ Prolonged immersion    ☐ Exhumed  
RIGOR: ☐ None    ☐ 1+    ☒ 2+    ☐ 3+    LIVOR: ☐ None    ☐ Anterior    ☒ Posterior    ☐ Lateral  
HEIGHT: 43 inches    ☐ Estimate    WEIGHT: 45 pounds    ☒ Estimate  
BODY TEMPERATURE: ☐ Warm    ☐ Cool    ☒ Cold    HAIR: Color brown    ☐ Beard    ☐ Mustache  
EYES: Color brown    Abnormalities \_\_\_\_\_  
TEETH: Upper    ☒ Natural    ☐ Dentures    ☐ Abnormalities \_\_\_\_\_  
Lower    ☒ Natural    ☐ Dentures    ☐ Abnormalities \_\_\_\_\_  
CLOTHING: pyjamas    ☐ Not clothed  
VALUABLES: \_\_\_\_\_    ☒ No valuables

# BODY DIAGRAMS



Indicate nature and location of wounds and other lesions (scars, tattoos, medical therapy, etc.) on these diagrams.

1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 26

**PURPOSE:** To document the findings of a medical examiner investigation. When completed, this form constitutes a report to the Chief Medical Examiner as required by G.S. 130A-385(a).  
**PREPARATION:** The investigating medical examiner completes all appropriate information, and signs the certification statement on the front of the form.  
**DISTRIBUTION:** Mail original copy to the [redacted] [redacted]  
**DISPOSITION:** This form is maintained by the Chief Medical Examiner in accordance with the current records disposition schedule published by the N.C. Division of Archives and History.  
**COPIES:** Additional copies may be ordered from the Office of the Chief Medical Examiner, [redacted] NC [redacted]

**COPIES:** Additional copies may be ordered from the Office of the Chief Medical Examiner, NC.

**NASS CDS OCCUPANT ASSESSMENT FORM:**  
**CASE VEHICLE SECOND-SEATED LEFT PASSENGER**





## OCCUPANT ASSESSMENT FORM

1. Primary Sampling Unit Number

10

2. Case Number - Stratum

9612

3. Vehicle Number

01

4. Occupant Number

03

### OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

03

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

2

(1) Male

(2) Female-not reported pregnant

(3) Female-pregnant-1st trimester(1st-3rd month)

(4) Female-pregnant-2nd trimester(4th-6th month)

(5) Female-pregnant-3rd trimester(7th-9th month)

(6) Female-pregnant-term unknown

(9) Unknown

7. Occupant's Height

094

Code actual height to the nearest  
centimeter.

(999) Unknown

37 inches X 2.54 = 93<sup>98</sup> centimeters

8. Occupant's Weight

012

Code actual weight to the nearest  
kilogram.

(999) Unknown

27 pounds X .4536 = 12 kilograms

9. Occupant's Role

2

(1) Driver

(2) Passenger

(9) Unknown

### OCCUPANT'S SEATING

10. Occupant's Seat Position

21

*Front Seat*

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify):

(15) On or in the lap of another occupant

*Second Seat*

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify):

(25) On or in the lap of another occupant

*Third Seat*

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify):

(35) On or in the lap of another occupant

*Fourth Seat*

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify):

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify):

(99) Unknown

11. Occupant's Posture

0

(0) Normal posture

*Abnormal posture*

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with  
another occupant or to look out a rear  
window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in  
front of seat

(8) Other abnormal posture (specify):

(9) Unknown

**EJECTION/ENTRAPMENT**12. Ejection 0

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

13. Ejection Area 0

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

14. Ejection Medium 0

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_
- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_
- (9) Unknown

15. Medium Status (Immediately Prior To Impact) 0

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

16. Entrapment 0

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.  
(specify): \_\_\_\_\_
- (9) Unknown

17. Occupant Mobility 3

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or not oriented to time or place
- (2) Removed from vehicle due to perceived serious injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (8) Removed from vehicle for other reasons  
(specify): \_\_\_\_\_
- (9) Unknown

*Because of age*

**BELT SYSTEM FUNCTION**18. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify):

(9) Unknown

19. Manual (Active) Belt System Use 13

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify):

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used—type unknown
- (08) Other belt used (specify):

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat—type unknown
- (18) Other belt used with child safety seat (specify):
- (99) Unknown if belt used

20. Proper Use of Manual (Active) Belts 4

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):

(8) Other improper use of manual belt system (specify):

(9) Unknown

21. Manual (Active) Belt Failure Modes During Accident 1

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

- (6) Broken retractor
- (7) Combination of above (specify):

(8) Other manual belt failure (specify):

(9) Unknown

22. Manual Shoulder Belt Upper Anchorage Adjustment 1

- (0) No manual shoulder belt
- (1) No upper anchorage adjustment for manual shoulder belt

*Adjustable shoulder Belt Upper Anchorage*

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

23. Automatic (Passive) Belt System Availability/Function 0

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

*Non-functional*

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

24. Automatic (Passive) Belt System Use 0

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):
- (3) Automatic belt use unknown
- (9) Unknown

25. Automatic (Passive) Belt System Type 0

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

26. Proper Use of Automatic (Passive) Belt System 0

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

*Automatic Belt Used Improperly*

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or

automatic shoulder belt used improperly with child safety seat (specify):

(8) Other improper use of automatic belt system (specify):

(9) Unknown

27. Automatic (Passive) Belt Failure Modes During Accident 0

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

- (6) Broken retractor
- (7) Combination of above (specify):
- (8) Other automatic belt failure (specify):

(9) Unknown

POLICE REPORTED RESTRAINT USE	AIR BAG SYSTEM FUNCTION
<p>28. Police Reported Belt Use <u>3</u></p> <p>(0) None used            (1) Police did not indicate belt use            (2) Shoulder belt            (3) Lap belt            (4) Lap and shoulder belt            (5) Belt used, type not specified            (6) Child safety seat            (7) Automatic belt            (8) Other type belt, (specify): _____</p> <p>(9) Police indicated "unknown" _____</p>	<p>30. Frontal Air Bag System Availability/Function <u>0</u>            (This Occupant Position)            (0) Not equipped/not available            (1) Air bag  <i>Non-functional</i>            (2) Air bag disconnected (specify): _____            (3) Air bag not reinstalled            (9) Unknown</p>
<p>29. Police Reported Air Bag Availability/Function <u>0</u></p> <p>(0) No air bag available            (1) Police did not indicate air bag availability/function            (2) Deployed            (3) Not deployed            (4) Unknown if deployed            (9) Police indicated "unknown"</p>	<p>31. Frontal Air Bag System Deployment (This Occupant Position) <u>0</u></p> <p>(0) Not equipped/not available            (1) Deployed during accident (as a result of impact)            (2) Deployed inadvertently just prior to accident            (3) Deployed, details unknown            (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)            (5) Unknown if deployed            (7) Nondeployed            (9) Unknown</p>
<p>Check the Primary Source Used In Determining Belt Use.</p> <p><input type="checkbox"/> Vehicle inspection  <input type="checkbox"/> Official injury data  <input checked="" type="checkbox"/> Driver/occupant interview  <input type="checkbox"/> Other (specify): _____</p> <p><input type="checkbox"/> Unknown if belt used _____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>32. Other Than First Seat Frontal Air Bag Availability/Function <u>0</u>            (This Occupant Position)            (0) Not equipped/not available            (1) Air bag  <i>Non-functional</i>            (2) Air bag disconnected (specify): _____            (3) Air bag not reinstalled            (9) Unknown  <i>Specify type of "other" air bag present:</i> _____</p>
	<p>33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) <u>0</u></p> <p>(0) Not equipped with an "other" air bag            (1) Deployed during accident (as a result of impact)            (2) Deployed inadvertently just prior to accident            (3) Deployed, details unknown            (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)            (5) Unknown if deployed            (7) Nondeployed            (9) Unknown</p>
	<p>34. Are There Indications of Air Bag System Failure? <u>0</u>            (This Occupant Position)            (0) Not equipped/not available            (1) No            (2) Yes (specify): _____            (9) Unknown</p>

## FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? 0

- (0) Not equipped/not available  
(1) No previous accidents

Yes

- (2) Previous accident(s) without deployment(s)  
(3) One previous accident with deployment  
(4) More than one previous accident with at least one deployment  
(8) Previous accidents, unknown deployment status  
(9) Unknown

36. Type of Air Bag 0

- (0) Not equipped/not available  
(1) Original manufacturer installed system  
(2) Retrofitted air bag  
(3) Replacement air bag  
(8) Unknown type of air bag  
(9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? 0

- (0) Not equipped/not available  
(1) No prior maintenance  
(2) Yes, prior maintenance (specify):  
\_\_\_\_\_  
(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number 00

- (00) Not equipped/not available  
\_\_\_\_\_  
Code the accident event sequence number that initiated the air bag deployment  
(96) Deployed, unknown event  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

39. CDC For Air Bag Deployment Impact 0

- (0) Not equipped/not available  
(1) Highest delta V  
(2) Second highest delta V  
(3) Other non-coded delta V (specify):  
\_\_\_\_\_  
(6) Deployed, unknown event  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

40. Longitudinal Component of +

Delta V For Air Bag Deployment Impact

- 000

- (\_000) Not equipped/not available  
Code the value of the delta V for the impact that initiated the air bag deployment  
(\_996) Deployment, unknown longitudinal Delta V  
(\_997) Not deployed  
(\_998) Unknown if deployed  
(\_999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? 0

- (0) Not equipped/not available  
(1) No  
(2) Yes  
(3) Deployed, unknown if flap(s) opened at designated tear points  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged? 0

- (0) Not equipped/not available  
(1) No  
(2) Yes (specify):  
(3) Deployed, unknown if air bag module cover flap(s) damaged  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

43. Was There Damage To The Air Bag? 00

- (00) Not equipped/not available  
(01) Not damaged

Yes - Air Bag Damage

- (02) Ruptured  
(03) Cut  
(04) Torn  
(05) Holed  
(06) Burned  
(07) Abraded  
(88) Other damage (specify):  
\_\_\_\_\_  
(95) Damaged, details unknown  
(96) Deployed, unknown if damaged  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown



**FIRST SEAT FRONTAL AIR BAG SYSTEM  
EVALUATION** *continued***HEAD RESTRAINT AND SEAT EVALUATION**

44. Source of Air Bag Damage 0 0  
 (00) Not equipped/not available  
 (01) Not damaged  
 (02) Object worn by occupant, (specify): \_\_\_\_\_  
 (03) Object carried by occupant, (specify): \_\_\_\_\_  
 (04) Adaptive/assistive controls, (specify): \_\_\_\_\_  
 (05) Fire in vehicle  
 (06) Thermal burns  
 (07) Rescue or emergency efforts  
 (88) Other damage source (specify): \_\_\_\_\_  
 (95) Damaged, unknown source  
 (96) Deployed, unknown if damaged  
 (97) Not deployed  
 (98) Unknown if deployed  
 (99) Unknown
45. Was The Air Bag Tethered? 0  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of tether straps): \_\_\_\_\_  
 (3) Deployed, unknown if tethered  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
46. Did The Air Bag Have Vent Ports? 0  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of vent ports): \_\_\_\_\_  
 (3) Deployed, unknown if vent ports present  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? 0  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify): \_\_\_\_\_  
 (3) Deployed, unknown if other occupant contact to air bag  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
48. Was This Occupant Wearing Eye-wear? 0  
 (0) Not air bag equipped/air bag not available  
 (1) No  
 (2) Eyeglasses/sunglasses  
 (3) Contact lenses  
 (4) Deployed, unknown if eyewear worn  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown

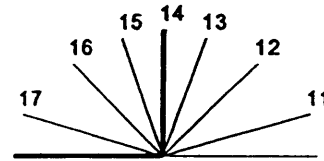
49. Head Restraint Type/Damage by Occupant at This Occupant Position 0  
 (0) No head restraints  
 (1) Integral—no damage  
 (2) Integral—damaged during accident  
 (3) Adjustable—no damage  
 (4) Adjustable—damaged during accident  
 (5) Add-on—no damage  
 (6) Add-on—damaged during accident  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown
50. Seat Type (this Occupant Position) 0 3  
 (00) Occupant not seated or no seat  
 (01) Bucket  
 (02) Bucket with folding back  
 (03) Bench  
 (04) Bench with separate back cushions  
 (05) Bench with folding back(s)  
 (06) Split bench with separate back cushions  
 (07) Split bench with folding back(s)  
 (08) Pedestal (i.e., column supported)  
 (09) Box mounted seat (i.e., van type)  
 (10) Other seat type (specify): \_\_\_\_\_  
 (99) Unknown
51. Seat Orientation (this Occupant Position) 1  
 (0) Occupant not seated or no seat  
 (1) Forward facing seat  
 (2) Rear facing seat  
 (3) Side facing seat (inward)  
 (4) Side facing seat (outward)  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown
52. Seat Track Adjusted Position Prior To Impact 1  
 (0) Occupant not seated or no seat  
 (1) Non-adjustable seat track
- Adjustable Seat Track*  
 (2) Seat at forward most track position  
 (3) Seat between forward most and middle track positions  
 (4) Seat at middle track position  
 (5) Seat between middle and rear most track positions  
 (6) Seat at rear most track position  
 (9) Unknown

**HEAD RESTRAINT AND SEAT EVALUATION** *continued*53. Seat Back Incline Prior and Post Impact 01

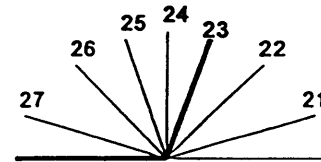
- (00) Occupant not seated or no seat  
 (01) Not adjustable

*Upright prior to impact*

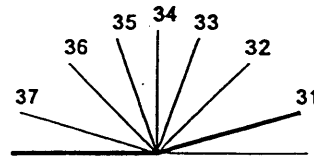
- (11) Moved to completely rearward position  
 (12) Moved to rearward midrange position  
 (13) Moved to slightly rearward position  
 (14) Retained pre-impact position  
 (15) Moved to slightly forward position  
 (16) Moved to forward midrange position  
 (17) Moved to completely forward position

*Slightly reclined prior to impact*

- (21) Moved to completely rearward position  
 (22) Moved to rearward midrange position  
 (23) Retained pre-impact position  
 (24) Moved to upright position  
 (25) Moved to slightly forward position  
 (26) Moved to forward midrange position  
 (27) Moved to completely forward position

*Completely reclined prior to impact*

- (31) Retained pre-impact position  
 (32) Moved to rearward midrange position  
 (33) Moved to slightly rearward position  
 (34) Moved to upright position  
 (35) Moved to slightly forward position  
 (36) Moved to forward midrange position  
 (37) Moved to completely forward position



(99) Unknown

54. Seat Performance (this Occupant Position) 1

- (0) Occupant not seated or no seat  
 (1) No seat performance failure(s)  
 (2) Seat adjusters failed  
 (3) Seat back folding locks or "seat back" failed  
     (specify): \_\_\_\_\_  
 (4) Seat track/anchors failed  
 (5) Deformed by impact of occupant  
 (6) Deformed by passenger compartment  
     intrusion, (specify): \_\_\_\_\_  
 (7) Combination of above (specify): \_\_\_\_\_  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

**CHILD SAFETY SEAT**55. Child Safety Seat Make/Model 998

(000) No child safety seat

Applicable codes are found in your NASS CDS  
Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):  
\_\_\_\_\_

(998) Unknown make/model

(999) Unknown if child safety seat used

58. Child Safety Seat Harness Usage 0359. Child Safety Seat Shield Usage 1260. Child Safety Seat Tether Usage 03Note: Options below applicable to  
Variables OA58-OA60.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*(01) After market harness/shield/tether  
added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market  
harness/shield/tether added(09) Unknown if harness/shield/tether  
added or used*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

56. Type of Child Safety Seat 4

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat - with shield

(5) Booster seat - without shield

(7) Other type child safety seat (specify):  
\_\_\_\_\_

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

57. Child Safety Seat Orientation 12

(00) No child safety seat

*Designed for Rear Facing for This Age/Weight*

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):  
\_\_\_\_\_

(09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):  
\_\_\_\_\_

(19) Unknown orientation

*Unknown Design or Orientation For This  
Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):  
\_\_\_\_\_

(29) Unknown orientation

(99) Unknown if child safety seat used

**INJURY CONSEQUENCES**61. Injury Severity (Police Rating) 0

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

62. Treatment - Mortality 0

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):  
\_\_\_\_\_

*Nonfatal*

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (7) Treatment - other (specify):  
\_\_\_\_\_
- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

63. Type Of Medical Facility (for Initial Treatment) 0

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):  
\_\_\_\_\_
- (9) Unknown

64. Hospital Stay 00

- (00) Not Hospitalized  
\_\_\_\_\_ Code the number of days (up through 60)  
that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

65. Working Days Lost 9 7

- \_\_\_\_\_ Code the number of days  
(up through 60) that the occupant  
lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

**STOP WORK HERE****VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**

**TO BE CODED BY THE ZONE CENTER****INJURY CONSEQUENCES**

66. Time to Death 00  
 \_\_\_\_\_ Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)  
 (00) Not fatal  
 (96) Fatal - ruled disease  
 (99) Unknown
67. 1st Medically Reported Cause of Death 00
68. 2nd Medically Reported Cause of Death 00
69. 3rd Medically Reported Cause of Death 00  
 \_\_\_\_\_ Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death  
 (00) Not fatal or no additional causes  
 (96) Mode of death given but specific injuries are not linked to cause of death. (specify): \_\_\_\_\_  
 (97) Other result (includes fatal ruled disease) (specify): \_\_\_\_\_  
 (99) Unknown
70. Number of Recorded Injuries for This Occupant 00  
 \_\_\_\_\_ Code the actual number of injuries recorded for this occupant.  
 (00) No recorded injuries  
 (97) Injured, details unknown  
 (99) Unknown if injured

**TRAUMA DATA**

71. Glasgow Coma Scale (GCS) Score 00  
 (at Medical Facility)  
 (00) Not injured  
 (01) Injured - not treated at medical facility  
 (02) No GCS Score at medical facility  
 (03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
 (97) Injured, details unknown  
 (99) Unknown if injured
72. Was the Occupant Given Blood? 1  
 (1) No - blood not given  
 (2) Yes - blood given  
 (specify units): \_\_\_\_\_  
 (9) Unknown if blood given
73. Arterial Blood Gases (ABG) - HCO<sub>3</sub> 00  
 (00) Not injured  
 (01) Injured, ABGs not measured or reported  
 (02-50) Code the actual value of the HCO<sub>3</sub>  
 (96) ABGs reported, HCO<sub>3</sub> unknown  
 (97) Injured, details unknown  
 (99) Unknown if injured

**BELT USE DETERMINATION**

74. Primary Source of Belt Use Determination 3  
 (0) Not equipped/not available/destroyed or rendered inoperative  
 (1) Vehicle inspection  
 (2) Official injury data  
 (3) Driver/occupant interview  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown if belt used

**NASS CDS OCCUPANT ASSESSMENT FORM:**  
**CASE VEHICLE SECOND-SEATED MIDDLE PASSENGER**





U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

## OCCUPANT ASSESSMENT FORM

Form Approved  
O.M.B. No. 2127-0021

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number 10  
2. Case Number - Stratum 9612  
3. Vehicle Number 01  
4. Occupant Number 04

### OCCUPANT'S CHARACTERISTICS

5. Occupant's Age 03  
Code actual age at time of accident.  
(00) Less than one year old (specify by month):  
  
(97) 97 years and older  
(99) Unknown
6. Occupant's Sex 1  
(1) Male  
(2) Female-not reported pregnant  
(3) Female-pregnant-1st trimester(1st-3rd month)  
(4) Female-pregnant-2nd trimester(4th-6th month)  
(5) Female-pregnant-3rd trimester(7th-9th month)  
(6) Female-pregnant-term unknown  
(9) Unknown
7. Occupant's Height 099  
Code actual height to the nearest  
centimeter.  
(999) Unknown  
  
39 inches X 2.54 = 99 centimeters
8. Occupant's Weight 016  
Code actual weight to the nearest  
kilogram.  
(999) Unknown  
  
35 pounds X .4536 = 15<sup>87</sup> kilograms
9. Occupant's Role 2  
(1) Driver  
(2) Passenger  
(9) Unknown

### OCCUPANT'S SEATING

10. Occupant's Seat Position 22  
*Front Seat*  
(11) Left side  
(12) Middle  
(13) Right side  
(14) Other (specify):  
(15) On or in the lap of another occupant
- Second Seat*  
(21) Left side  
(22) Middle  
(23) Right side  
(24) Other (specify):  
(25) On or in the lap of another occupant
- Third Seat*  
(31) Left side  
(32) Middle  
(33) Right side  
(34) Other (specify):  
(35) On or in the lap of another occupant
- Fourth Seat*  
(41) Left side  
(42) Middle  
(43) Right side  
(44) Other (specify):  
(45) On or in the lap of another occupant
- (97) In or on unenclosed area  
(98) Other seat (specify):  
(99) Unknown
11. Occupant's Posture 0  
(0) Normal posture
- Abnormal posture*  
(1) Kneeling or standing on seat  
(2) Lying on or across seat  
(3) Kneeling, standing or sitting in front of seat  
(4) Sitting sideways or turned to talk with  
another occupant or to look out a rear  
window  
(5) Sitting on a console  
(6) Lying back in a reclined seat position  
(7) Bracing with feet or hands on a surface in  
front of seat  
(8) Other abnormal posture (specify):  
(9) Unknown

**EJECTION/ENTRAPMENT**12. Ejection 0

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

13. Ejection Area 0

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

14. Ejection Medium 0

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_
- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_
- (9) Unknown

15. Medium Status (Immediately Prior To Impact) 0

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

16. Entrapment 0

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.  
(specify): \_\_\_\_\_
- (9) Unknown

17. Occupant Mobility 3

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or not oriented to time or place
- (2) Removed from vehicle due to perceived serious injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (8) Removed from vehicle for other reasons  
(specify): \_\_\_\_\_
- (9) Unknown

*Because of age*

## BELT SYSTEM FUNCTION

<p>18. Manual (Active) Belt System Availability <u>4</u></p> <p>(0) None available</p> <p>(1) Belt removed/destroyed</p> <p>(2) Shoulder belt</p> <p>(3) Lap belt</p> <p>(4) Lap and shoulder belt</p> <p>(5) Belt available—type unknown</p> <p><i>Integral Belt Partially Destroyed</i></p> <p>(6) Shoulder belt (lap belt destroyed/removed)</p> <p>(7) Lap belt (shoulder belt destroyed/removed)</p> <p>(8) Other belt (specify): _____</p> <p>(9) Unknown</p>	<p>22. Manual Shoulder Belt Upper Anchorage Adjustment <u>1</u></p> <p>(0) No manual shoulder belt</p> <p>(1) No upper anchorage adjustment for manual shoulder belt</p> <p><i>Adjustable shoulder Belt Upper Anchorage</i></p> <p>(2) In full up position</p> <p>(3) In mid position</p> <p>(4) In full down position</p> <p>(5) Position unknown</p> <p>(9) Unknown if position has adjustable upper anchorage adjustment</p>
<p>19. Manual (Active) Belt System Use <u>13</u></p> <p>(00) None used, not available, or belt removed/destroyed</p> <p>(01) Inoperative (specify): _____</p> <p>(02) Shoulder belt</p> <p>(03) Lap belt</p> <p>(04) Lap and shoulder belt</p> <p>(05) Belt used—type unknown</p> <p>(08) Other belt used (specify): _____</p> <p>(12) Shoulder belt used with child safety seat</p> <p>(13) Lap belt used with child safety seat</p> <p>(14) Lap and shoulder belt used with child safety seat</p> <p>(15) Belt used with child safety seat—type unknown</p> <p>(18) Other belt used with child safety seat (specify): _____</p> <p>(99) Unknown if belt used</p>	<p>23. Automatic (Passive) Belt System Availability/Function <u>0</u></p> <p>(0) Not equipped/not available</p> <p>(1) 2 point automatic belts</p> <p>(2) 3 point automatic belts</p> <p>(3) Automatic belts - type unknown</p> <p><i>Non-functional</i></p> <p>(4) Automatic belts destroyed or rendered inoperative</p> <p>(9) Unknown</p> <p>24. Automatic (Passive) Belt System Use <u>0</u></p> <p>(0) Not equipped/not available/destroyed or rendered inoperative</p> <p>(1) Automatic belt in use</p> <p>(2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): _____</p> <p>(3) Automatic belt use unknown</p> <p>(9) Unknown</p>
<p>20. Proper Use of Manual (Active) Belts <u>4</u></p> <p>(0) None used or not available</p> <p>(1) Belt used properly</p> <p>(2) Belt used properly with child safety seat</p> <p><i>Belt Used Improperly</i></p> <p>(3) Shoulder belt worn under arm</p> <p>(4) Shoulder belt worn behind back or seat</p> <p>(5) Belt worn around more than one person</p> <p>(6) Lap belt worn on abdomen</p> <p>(7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____</p> <p>(8) Other improper use of manual belt system (specify): _____</p> <p>(9) Unknown</p>	<p>25. Automatic (Passive) Belt System Type <u>0</u></p> <p>(0) Not equipped/not available</p> <p>(1) Non-motorized system</p> <p>(2) Motorized system</p> <p>(9) Unknown</p> <p>26. Proper Use of Automatic (Passive) Belt System <u>0</u></p> <p>(0) Not equipped/not available/not used</p> <p>(1) Automatic belt used properly</p> <p>(2) Automatic belt used properly with child safety seat</p> <p><i>Automatic Belt Used Improperly</i></p> <p>(3) Automatic shoulder belt worn under arm</p> <p>(4) Automatic shoulder belt worn behind back</p> <p>(5) Automatic belt worn around more than one person</p> <p>(6) Lap portion of automatic belt worn on abdomen</p> <p>(7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): _____</p> <p>(8) Other improper use of automatic belt system (specify): _____</p> <p>(9) Unknown</p>
<p>21. Manual (Active) Belt Failure Modes During Accident <u>1</u></p> <p>(0) No manual belt used or not available</p> <p>(1) No manual belt failure(s)</p> <p>(2) Torn webbing (stretched webbing not included)</p> <p>(3) Broken buckle or latchplate</p> <p>(4) Upper anchorage separated</p> <p>(5) Other anchorage separated (specify): _____</p> <p>(6) Broken retractor</p> <p>(7) Combination of above (specify): _____</p> <p>(8) Other manual belt failure (specify): _____</p> <p>(9) Unknown</p>	<p>27. Automatic (Passive) Belt Failure Modes During Accident <u>0</u></p> <p>(0) Not equipped/not available/not in use</p> <p>(1) No automatic belt failure(s)</p> <p>(2) Torn webbing (stretched webbing not included)</p> <p>(3) Broken buckle or latchplate</p> <p>(4) Upper anchorage separated</p> <p>(5) Other anchorage separated (specify): _____</p> <p>(6) Broken retractor</p> <p>(7) Combination of above (specify): _____</p> <p>(8) Other automatic belt failure (specify): _____</p> <p>(9) Unknown</p>

**POLICE REPORTED RESTRAINT USE****AIR BAG SYSTEM FUNCTION**28. Police Reported Belt Use 3

- (0) None used  
 (1) Police did not indicate belt use  
 (2) Shoulder belt  
 (3) Lap belt  
 (4) Lap and shoulder belt  
 (5) Belt used, type not specified  
 (6) Child safety seat  
 (7) Automatic belt  
 (8) Other type belt, (specify):

\_\_\_\_\_  
 (9) Police indicated "unknown"

29. Police Reported Air Bag Availability/Function 0

- (0) No air bag available  
 (1) Police did not indicate air bag availability/function  
 (2) Deployed  
 (3) Not deployed  
 (4) Unknown if deployed  
 (9) Police indicated "unknown"

Check the Primary Source Used In Determining Belt Use.

- [ ] Vehicle inspection  
 [X] Official injury data  
 [X] Driver/occupant interview  
 [ ] Other (specify):

[ ] Unknown if belt used

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

30. Frontal Air Bag System 0

Availability/Function  
 (This Occupant Position)

- (0) Not equipped/not available  
 (1) Air bag

*Non-functional*

- (2) Air bag disconnected (specify):

- (3) Air bag not reinstalled  
 (9) Unknown

31. Frontal Air Bag System Deployment 0

- (This Occupant Position)  
 (0) Not equipped/not available  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

32. Other Than First Seat Frontal Air Bag 0

Availability/Function  
 (This Occupant Position)

- (0) Not equipped/not available

- (1) Air bag

*Non-functional*

- (2) Air bag disconnected (specify):

- (3) Air bag not reinstalled  
 (9) Unknown

*Specify type of "other" air bag present:*

\_\_\_\_\_

33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) 0

- (0) Not equipped with an "other" air bag  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

34. Are There Indications of Air Bag System Failure? 0

(This Occupant Position)

- (0) Not equipped/not available

- (1) No

- (2) Yes (specify):

- (9) Unknown

## FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? 0

- (0) Not equipped/not available  
(1) No previous accidents

Yes

- (2) Previous accident(s) without deployment(s)  
(3) One previous accident with deployment  
(4) More than one previous accident with at least one deployment  
(8) Previous accidents, unknown deployment status  
(9) Unknown

36. Type of Air Bag 0

- (0) Not equipped/not available  
(1) Original manufacturer installed system  
(2) Retrofitted air bag  
(3) Replacement air bag  
(8) Unknown type of air bag  
(9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? 0

- (0) Not equipped/not available  
(1) No prior maintenance  
(2) Yes, prior maintenance (specify): \_\_\_\_\_  
(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number 0 0

- (00) Not equipped/not available  
\_\_\_\_\_ Code the accident event sequence number that initiated the air bag deployment  
(96) Deployed, unknown event  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

39. CDC For Air Bag Deployment Impact 0

- (0) Not equipped/not available  
(1) Highest delta V  
(2) Second highest delta V  
(3) Other non-coded delta V (specify): \_\_\_\_\_  
(6) Deployed, unknown event  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

40. Longitudinal Component of Delta V For Air Bag Deployment Impact + - 0 0 0

- (\_000) Not equipped/not available  
Code the value of the delta V for the impact that initiated the air bag deployment  
(\_996) Deployment, unknown longitudinal Delta V  
(\_997) Not deployed  
(\_998) Unknown if deployed  
(\_999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? 0

- (0) Not equipped/not available  
(1) No  
(2) Yes  
(3) Deployed, unknown if flap(s) opened at designated tear points  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged? 0

- (0) Not equipped/not available  
(1) No  
(2) Yes (specify): \_\_\_\_\_  
(3) Deployed, unknown if air bag module cover flap(s) damaged  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

43. Was There Damage To The Air Bag? 0 0

- (00) Not equipped/not available  
(01) Not damaged

Yes - Air Bag Damage

- (02) Ruptured  
(03) Cut  
(04) Torn  
(05) Holed  
(06) Burned  
(07) Abraded  
(88) Other damage (specify): \_\_\_\_\_  
(95) Damaged, details unknown  
(96) Deployed, unknown if damaged  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

**FIRST SEAT FRONTAL AIR BAG SYSTEM  
EVALUATION** *continued*

44. Source of Air Bag Damage 0 0  
 (00) Not equipped/not available  
 (01) Not damaged  
 (02) Object worn by occupant, (specify):  
 (03) Object carried by occupant, (specify):  
 (04) Adaptive/assistive controls, (specify):  
 (05) Fire in vehicle  
 (06) Thermal burns  
 (07) Rescue or emergency efforts  
 (88) Other damage source (specify):  
 (95) Damaged, unknown source  
 (96) Deployed, unknown if damaged  
 (97) Not deployed  
 (98) Unknown if deployed  
 (99) Unknown
45. Was The Air Bag Tethered? 0  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of tether straps):  
 (3) Deployed, unknown if tethered  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
46. Did The Air Bag Have Vent Ports? 0  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of vent ports):  
 (3) Deployed, unknown if vent ports present  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? 0  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify):  
 (3) Deployed, unknown if other occupant contact to air bag  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
48. Was This Occupant Wearing Eye-wear? 0  
 (0) Not air bag equipped/air bag not available  
 (1) No  
 (2) Eyeglasses/sunglasses  
 (3) Contact lenses  
 (4) Deployed, unknown if eyewear worn  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown

**HEAD RESTRAINT AND SEAT EVALUATION**

49. Head Restraint Type/Damage by Occupant at This Occupant Position 0  
 (0) No head restraints  
 (1) Integral—no damage  
 (2) Integral—damaged during accident  
 (3) Adjustable—no damage  
 (4) Adjustable—damaged during accident  
 (5) Add-on—no damage  
 (6) Add-on—damaged during accident  
 (8) Other (specify):  
 (9) Unknown
50. Seat Type (this Occupant Position) 0 3  
 (00) Occupant not seated or no seat  
 (01) Bucket  
 (02) Bucket with folding back  
 (03) Bench  
 (04) Bench with separate back cushions  
 (05) Bench with folding back(s)  
 (06) Split bench with separate back cushions  
 (07) Split bench with folding back(s)  
 (08) Pedestal (i.e., column supported)  
 (09) Box mounted seat (i.e., van type)  
 (10) Other seat type (specify):  
 (99) Unknown
51. Seat Orientation (this Occupant Position) 1  
 (0) Occupant not seated or no seat  
 (1) Forward facing seat  
 (2) Rear facing seat  
 (3) Side facing seat (inward)  
 (4) Side facing seat (outward)  
 (8) Other (specify):  
 (9) Unknown
52. Seat Track Adjusted Position Prior To Impact 1  
 (0) Occupant not seated or no seat  
 (1) Non-adjustable seat track
- Adjustable Seat Track*  
 (2) Seat at forward most track position  
 (3) Seat between forward most and middle track positions  
 (4) Seat at middle track position  
 (5) Seat between middle and rear most track positions  
 (6) Seat at rear most track position  
 (9) Unknown

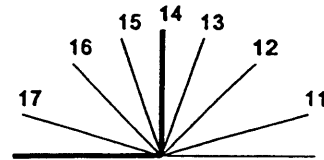


**HEAD RESTRAINT AND SEAT EVALUATION** *continued*53. Seat Back Incline Prior and Post Impact 01

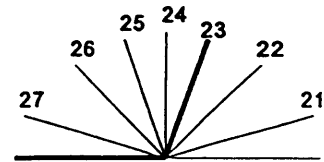
- (00) Occupant not seated or no seat  
 (01) Not adjustable

***Upright prior to impact***

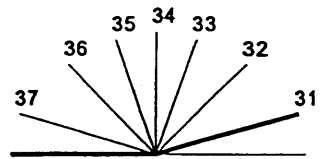
- (11) Moved to completely rearward position  
 (12) Moved to rearward midrange position  
 (13) Moved to slightly rearward position  
 (14) Retained pre-impact position  
 (15) Moved to slightly forward position  
 (16) Moved to forward midrange position  
 (17) Moved to completely forward position

***Slightly reclined prior to impact***

- (21) Moved to completely rearward position  
 (22) Moved to rearward midrange position  
 (23) Retained pre-impact position  
 (24) Moved to upright position  
 (25) Moved to slightly forward position  
 (26) Moved to forward midrange position  
 (27) Moved to completely forward position

***Completely reclined prior to impact***

- (31) Retained pre-impact position  
 (32) Moved to rearward midrange position  
 (33) Moved to slightly rearward position  
 (34) Moved to upright position  
 (35) Moved to slightly forward position  
 (36) Moved to forward midrange position  
 (37) Moved to completely forward position



(99) Unknown

## 54. Seat Performance (this Occupant Position) \_\_\_\_\_

- (0) Occupant not seated or no seat  
 (1) No seat performance failure(s)  
 (2) Seat adjusters failed  
 (3) Seat back folding locks or "seat back" failed (specify): \_\_\_\_\_  
 (4) Seat track/anchors failed  
 (5) Deformed by impact of occupant  
 (6) Deformed by passenger compartment intrusion, (specify): \_\_\_\_\_  
 (7) Combination of above (specify): \_\_\_\_\_  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

**CHILD SAFETY SEAT**55. Child Safety Seat Make/Model 9 9 8

(000) No child safety seat

Applicable codes are found in your NASS CDS  
Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):  
\_\_\_\_\_

(998) Unknown make/model

(999) Unknown if child safety seat used

56. Type of Child Safety Seat 4

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat - with shield

(5) Booster seat - without shield

(7) Other type child safety seat (specify):  
\_\_\_\_\_

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

57. Child Safety Seat Orientation 1 2

(00) No child safety seat

*Designed for Rear Facing for This Age/Weight*

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):  
\_\_\_\_\_

(09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):  
\_\_\_\_\_

(19) Unknown orientation

*Unknown Design or Orientation For This  
Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):  
\_\_\_\_\_

(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage 0 359. Child Safety Seat Shield Usage 1 260. Child Safety Seat Tether Usage 0 3Note: Options below applicable to  
Variables OA58-OA60.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*(01) After market harness/shield/tether  
added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market  
harness/shield/tether added(09) Unknown if harness/shield/tether  
added or used*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

**INJURY CONSEQUENCES****61. Injury Severity (Police Rating)** 0

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

**62. Treatment - Mortality** 0

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):  
\_\_\_\_\_

*Nonfatal*

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (7) Treatment - other (specify):  
\_\_\_\_\_
- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

**63. Type Of Medical Facility (for Initial Treatment)** 0

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):  
\_\_\_\_\_
- (9) Unknown

**64. Hospital Stay** 00

- (00) Not Hospitalized  
\_\_\_\_\_ Code the number of days (up through 60)  
that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

**65. Working Days Lost** 97

- \_\_\_\_\_ Code the number of days  
(up through 60) that the occupant  
lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

**STOP WORK HERE****VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**

**TO BE CODED BY THE ZONE CENTER****INJURY CONSEQUENCES**66. Time to Death 00

Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)

- (00) Not fatal  
(96) Fatal - ruled disease  
(99) Unknown

67. 1st Medically Reported Cause of Death 0068. 2nd Medically Reported Cause of Death 0069. 3rd Medically Reported Cause of Death 00

Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

- (00) Not fatal or no additional causes  
(96) Mode of death given but specific injuries are not linked to cause of death. (specify):

(97) Other result (includes fatal ruled disease) (specify):

(99) Unknown

70. Number of Recorded Injuries for This Occupant 00

Code the actual number of injuries recorded for this occupant.

- (00) No recorded injuries  
(97) Injured, details unknown  
(99) Unknown if injured

**TRAUMA DATA**71. Glasgow Coma Scale (GCS) Score 03  
(at Medical Facility)

- (00) Not injured  
(01) Injured - not treated at medical facility  
(02) No GCS Score at medical facility  
(03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
(97) Injured, details unknown  
(99) Unknown if injured

72. Was the Occupant Given Blood? 1

- (1) No - blood not given  
(2) Yes - blood given  
(specify units):  
(9) Unknown if blood given

73. Arterial Blood Gases (ABG) - HCO<sub>3</sub> 00

- (00) Not injured  
(01) Injured, ABGs not measured or reported  
(02-50) Code the actual value of the HCO<sub>3</sub>  
(96) ABGs reported, HCO<sub>3</sub> unknown  
(97) Injured, details unknown  
(99) Unknown if injured

**BELT USE DETERMINATION**74. Primary Source of Belt Use Determination 3

- (0) Not equipped/not available/destroyed or rendered inoperative  
(1) Vehicle inspection  
(2) Official injury data  
(3) Driver/occupant interview  
(8) Other (specify):  
(9) Unknown if belt used

**NASS CDS OCCUPANT ASSESSMENT FORM:**  
**VEHICLE #2 DRIVER**



## OCCUPANT ASSESSMENT FORM

1. Primary Sampling Unit Number

10

2. Case Number - Stratum

9612

3. Vehicle Number

02

4. Occupant Number

01

### OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

74

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

2

(1) Male

(2) Female-not reported pregnant

(3) Female-pregnant-1st trimester(1st-3rd month)

(4) Female-pregnant-2nd trimester(4th-6th month)

(5) Female-pregnant-3rd trimester(7th-9th month)

(6) Female-pregnant-term unknown

(9) Unknown

7. Occupant's Height

160

Code actual height to the nearest  
centimeter.

(999) Unknown

63 inches X 2.54 = 160 centimeters

8. Occupant's Weight

078

Code actual weight to the nearest  
kilogram.

(999) Unknown

172 pounds X .4536 = 78 kilograms

9. Occupant's Role

1

(1) Driver

(2) Passenger

(9) Unknown

### OCCUPANT'S SEATING

10. Occupant's Seat Position

11

*Front Seat*

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify):

(15) On or in the lap of another occupant

*Second Seat*

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify):

(25) On or in the lap of another occupant

*Third Seat*

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify):

(35) On or in the lap of another occupant

*Fourth Seat*

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify):

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify):

(99) Unknown

11. Occupant's Posture

0

(0) Normal posture

*Abnormal posture*

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with  
another occupant or to look out a rear  
window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in  
front of seat

(8) Other abnormal posture (specify):

(9) Unknown



**EJECTION/ENTRAPMENT**

## 12. Ejection

0

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

## 13. Ejection Area

0

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

## 14. Ejection Medium

0

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_
- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_
- (9) Unknown

## 15. Medium Status (Immediately Prior To Impact)

0

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

## 16. Entrapment

0

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.  
(specify): \_\_\_\_\_
- (9) Unknown

## 17. Occupant Mobility

2

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or not oriented to time or place
- (2) Removed from vehicle due to perceived serious injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (8) Removed from vehicle for other reasons  
(specify): \_\_\_\_\_
- (9) Unknown

## BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify):

(9) Unknown

19. Manual (Active) Belt System Use 0 0

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify):

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used—type unknown
- (08) Other belt used (specify):

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat—type unknown
- (18) Other belt used with child safety seat (specify):
- (99) Unknown if belt used

20. Proper Use of Manual (Active) Belts 0

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):

(8) Other improper use of manual belt system (specify):

(9) Unknown

21. Manual (Active) Belt Failure Modes During Accident 0

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

- (6) Broken retractor
- (7) Combination of above (specify):

(8) Other manual belt failure (specify):

(9) Unknown

22. Manual Shoulder Belt Upper Anchorage Adjustment 1

- (0) No manual shoulder belt
- (1) No upper anchorage adjustment for manual shoulder belt

*Adjustable shoulder Belt Upper Anchorage*

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

23. Automatic (Passive) Belt System Availability/Function 0

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

*Non-functional*

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

24. Automatic (Passive) Belt System Use 0

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):
- (3) Automatic belt use unknown
- (9) Unknown

25. Automatic (Passive) Belt System Type 0

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

26. Proper Use of Automatic (Passive) Belt System 0

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

*Automatic Belt Used Improperly*

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or

automatic shoulder belt used improperly with child safety seat (specify):

- (8) Other improper use of automatic belt system (specify):
- (9) Unknown

27. Automatic (Passive) Belt Failure Modes During Accident 0

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

- (6) Broken retractor
- (7) Combination of above (specify):
- (8) Other automatic belt failure (specify):

(9) Unknown

**POLICE REPORTED RESTRAINT USE****AIR BAG SYSTEM FUNCTION**28. Police Reported Belt Use 0

- (0) None used
- (1) Police did not indicate belt use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Automatic belt
- (8) Other type belt, (specify):

\_\_\_\_\_  
 (9) Police indicated "unknown"

29. Police Reported Air Bag Availability/Function 1

- (0) No air bag available
- (1) Police did not indicate air bag availability/function
- (2) Deployed
- (3) Not deployed
- (4) Unknown if deployed
- (9) Police indicated "unknown"

Check the Primary Source Used In Determining Belt Use.

- ☒ Vehicle inspection
- ☐ Official injury data
- ☐ Driver/occupant interview
- ☐ Other (specify):

☐ Unknown if belt used

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

30. Frontal Air Bag System 0

Availability/Function  
 (This Occupant Position)

- (0) Not equipped/not available
- (1) Air bag

*Non-functional*

- (2) Air bag disconnected (specify):

(3) Air bag not reinstalled

(9) Unknown

31. Frontal Air Bag System Deployment 0

(This Occupant Position)

- (0) Not equipped/not available
- (1) Deployed during accident (as a result of impact)
- (2) Deployed inadvertently just prior to accident
- (3) Deployed, details unknown
- (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (5) Unknown if deployed
- (7) Nondeployed
- (9) Unknown

32. Other Than First Seat Frontal Air Bag 0

Availability/Function  
 (This Occupant Position)

- (0) Not equipped/not available
- (1) Air bag

*Non-functional*

- (2) Air bag disconnected (specify):

(3) Air bag not reinstalled

(9) Unknown

*Specify type of "other" air bag present:*

\_\_\_\_\_

33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) 0

- (0) Not equipped with an "other" air bag
- (1) Deployed during accident (as a result of impact)

(2) Deployed inadvertently just prior to accident

(3) Deployed, details unknown

(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)

(5) Unknown if deployed

(7) Nondeployed

(9) Unknown

34. Are There Indications of Air Bag System Failure? 0

(This Occupant Position)

- (0) Not equipped/not available

(1) No

(2) Yes (specify):

(9) Unknown

## FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? 0

- (0) Not equipped/not available  
(1) No previous accidents

Yes

- (2) Previous accident(s) without deployment(s)  
(3) One previous accident with deployment  
(4) More than one previous accident with at least one deployment  
(8) Previous accidents, unknown deployment status  
(9) Unknown

36. Type of Air Bag 0

- (0) Not equipped/not available  
(1) Original manufacturer installed system  
(2) Retrofitted air bag  
(3) Replacement air bag  
(8) Unknown type of air bag  
(9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? 0

- (0) Not equipped/not available  
(1) No prior maintenance  
(2) Yes, prior maintenance (specify):  
\_\_\_\_\_  
(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number 00

- (00) Not equipped/not available  
\_\_\_\_\_  
Code the accident event sequence number that initiated the air bag deployment  
(96) Deployed, unknown event  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

39. CDC For Air Bag Deployment Impact 0

- (0) Not equipped/not available  
(1) Highest delta V  
(2) Second highest delta V  
(3) Other non-coded delta V (specify):  
\_\_\_\_\_  
(6) Deployed, unknown event  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

40. Longitudinal Component of Delta V For Air Bag Deployment Impact +  
- 0 0 0

- (\_000) Not equipped/not available  
Code the value of the delta V for the impact that initiated the air bag deployment  
(\_996) Deployment, unknown longitudinal Delta V  
(\_997) Not deployed  
(\_998) Unknown if deployed  
(\_999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? 0

- (0) Not equipped/not available  
(1) No  
(2) Yes  
(3) Deployed, unknown if flap(s) opened at designated tear points  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged? 0

- (0) Not equipped/not available  
(1) No  
(2) Yes (specify):  
(3) Deployed, unknown if air bag module cover flap(s) damaged  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

43. Was There Damage To The Air Bag? 00

- (00) Not equipped/not available  
(01) Not damaged

Yes - Air Bag Damage

- (02) Ruptured  
(03) Cut  
(04) Torn  
(05) Holed  
(06) Burned  
(07) Abraded  
(88) Other damage (specify):  
\_\_\_\_\_

- (95) Damaged, details unknown  
(96) Deployed, unknown if damaged  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

**FIRST SEAT FRONTAL AIR BAG SYSTEM  
EVALUATION** *continued***HEAD RESTRAINT AND SEAT EVALUATION**

44. Source of Air Bag Damage 00  
 (00) Not equipped/not available  
 (01) Not damaged  
 (02) Object worn by occupant, (specify):  
 (03) Object carried by occupant, (specify):  
 (04) Adaptive/assistive controls, (specify):  
 (05) Fire in vehicle  
 (06) Thermal burns  
 (07) Rescue or emergency efforts  
 (08) Other damage source (specify):  
 (95) Damaged, unknown source  
 (96) Deployed, unknown if damaged  
 (97) Not deployed  
 (98) Unknown if deployed  
 (99) Unknown
45. Was The Air Bag Tethered? 0  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of tether straps):  
 (3) Deployed, unknown if tethered  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
46. Did The Air Bag Have Vent Ports? 0  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of vent ports):  
 (3) Deployed, unknown if vent ports present  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? 0  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify):  
 (3) Deployed, unknown if other occupant contact to air bag  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
48. Was This Occupant Wearing Eye-wear? 0  
 (0) Not air bag equipped/air bag not available  
 (1) No  
 (2) Eyeglasses/sunglasses  
 (3) Contact lenses  
 (4) Deployed, unknown if eyewear worn  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown

49. Head Restraint Type/Damage by Occupant at This Occupant Position 3  
 (0) No head restraints  
 (1) Integral—no damage  
 (2) Integral—damaged during accident  
 (3) Adjustable—no damage  
 (4) Adjustable—damaged during accident  
 (5) Add-on—no damage  
 (6) Add-on—damaged during accident  
 (8) Other (specify):  
 (9) Unknown
50. Seat Type (this Occupant Position) 04  
 (00) Occupant not seated or no seat  
 (01) Bucket  
 (02) Bucket with folding back  
 (03) Bench  
 (04) Bench with separate back cushions  
 (05) Bench with folding back(s)  
 (06) Split bench with separate back cushions  
 (07) Split bench with folding back(s)  
 (08) Pedestal (i.e., column supported)  
 (09) Box mounted seat (i.e., van type)  
 (10) Other seat type (specify):  
 (99) Unknown
51. Seat Orientation (this Occupant Position) 1  
 (0) Occupant not seated or no seat  
 (1) Forward facing seat  
 (2) Rear facing seat  
 (3) Side facing seat (inward)  
 (4) Side facing seat (outward)  
 (8) Other (specify):  
 (9) Unknown
52. Seat Track Adjusted Position Prior To Impact 2 \*  
 (0) Occupant not seated or no seat  
 (1) Non-adjustable seat track
- Adjustable Seat Track*  
 (2) Seat at forward most track position  
 (3) Seat between forward most and middle track positions  
 (4) Seat at middle track position  
 (5) Seat between middle and rear most track positions  
 (6) Seat at rear most track position  
 (9) Unknown

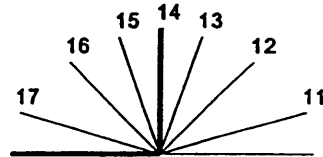
\* per driver VEHICLE  
 Inspection showed seat  
 TRACK in Rearward most  
 position. MOST likely  
 moved during removal  
 of driver by EMT's.

**HEAD RESTRAINT AND SEAT EVALUATION** *continued***53. Seat Back Incline Prior and Post Impact** 01

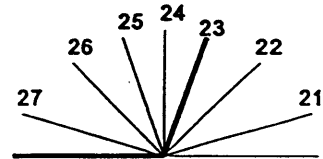
- (00) Occupant not seated or no seat  
 (01) Not adjustable

***Upright prior to impact***

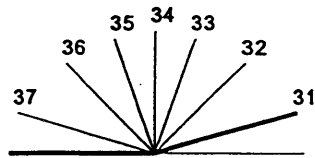
- (11) Moved to completely rearward position  
 (12) Moved to rearward midrange position  
 (13) Moved to slightly rearward position  
 (14) Retained pre-impact position  
 (15) Moved to slightly forward position  
 (16) Moved to forward midrange position  
 (17) Moved to completely forward position

***Slightly reclined prior to impact***

- (21) Moved to completely rearward position  
 (22) Moved to rearward midrange position  
 (23) Retained pre-impact position  
 (24) Moved to upright position  
 (25) Moved to slightly forward position  
 (26) Moved to forward midrange position  
 (27) Moved to completely forward position

***Completely reclined prior to impact***

- (31) Retained pre-impact position  
 (32) Moved to rearward midrange position  
 (33) Moved to slightly rearward position  
 (34) Moved to upright position  
 (35) Moved to slightly forward position  
 (36) Moved to forward midrange position  
 (37) Moved to completely forward position



(99) Unknown

**54. Seat Performance (this Occupant Position)** 1

- (0) Occupant not seated or no seat  
 (1) No seat performance failure(s)  
 (2) Seat adjusters failed  
 (3) Seat back folding locks or "seat back" failed (specify): \_\_\_\_\_  
 (4) Seat track/anchors failed  
 (5) Deformed by impact of occupant  
 (6) Deformed by passenger compartment intrusion, (specify): \_\_\_\_\_  
 (7) Combination of above (specify): \_\_\_\_\_  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown



**CHILD SAFETY SEAT**55. Child Safety Seat Make/Model 0 0 0

(000) No child safety seat

Applicable codes are found in your NASS CDS  
Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):  
\_\_\_\_\_

(998) Unknown make/model

(999) Unknown if child safety seat used

56. Type of Child Safety Seat 0

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat - with shield

(5) Booster seat - without shield

(7) Other type child safety seat (specify):  
\_\_\_\_\_

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

57. Child Safety Seat Orientation 0 0

(00) No child safety seat

*Designed for Rear Facing for This Age/Weight*

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):  
\_\_\_\_\_

(09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):  
\_\_\_\_\_

(19) Unknown orientation

*Unknown Design or Orientation For This  
Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):  
\_\_\_\_\_

(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage 0 059. Child Safety Seat Shield Usage 0 060. Child Safety Seat Tether Usage 0 0Note: Options below applicable to  
Variables OA58-OA60.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*(01) After market harness/shield/tether  
added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market  
harness/shield/tether added(09) Unknown if harness/shield/tether  
added or used*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

**INJURY CONSEQUENCES**61. Injury Severity (Police Rating) 2

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

62. Treatment - Mortality 4

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):  
\_\_\_\_\_

*Nonfatal*

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (7) Treatment - other (specify):  
\_\_\_\_\_
- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

63. Type Of Medical Facility (for Initial Treatment) 2

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):  
\_\_\_\_\_

(9) Unknown

64. Hospital Stay 00

(00) Not Hospitalized

\_\_\_\_\_ Code the number of days (up through 60) that the occupant stayed in hospital.

- (61) 61 days or more
- (99) Unknown

65. Working Days Lost 97

\_\_\_\_\_ Code the number of days (up through 60) that the occupant lost from work due to the accident

- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

**STOP WORK HERE****VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**

**TO BE CODED BY THE ZONE CENTER****INJURY CONSEQUENCES**66. Time to Death 00

Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)

- (00) Not fatal  
(96) Fatal - ruled disease  
(99) Unknown

67. 1st Medically Reported Cause of Death 0068. 2nd Medically Reported Cause of Death 0069. 3rd Medically Reported Cause of Death 00

Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

- (00) Not fatal or no additional causes  
(96) Mode of death given but specific injuries are not linked to cause of death. (specify):

(97) Other result (includes fatal ruled disease) (specify):

(99) Unknown

70. Number of Recorded Injuries for This Occupant 06

Code the actual number of injuries recorded for this occupant.

- (00) No recorded injuries  
(97) Injured, details unknown  
(99) Unknown if injured

**TRAUMA DATA**71. Glasgow Coma Scale (GCS) Score 02  
(at Medical Facility)

- (00) Not injured  
(01) Injured - not treated at medical facility  
(02) No GCS Score at medical facility  
(03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
(97) Injured, details unknown  
(99) Unknown if injured

72. Was the Occupant Given Blood? 9

- (1) No - blood not given  
(2) Yes - blood given  
(specify units):  
(9) Unknown if blood given

73. Arterial Blood Gases (ABG) - HCO<sub>3</sub> 01

- (00) Not injured  
(01) Injured, ABGs not measured or reported  
(02-50) Code the actual value of the HCO<sub>3</sub>  
(96) ABGs reported, HCO<sub>3</sub> unknown  
(97) Injured, details unknown  
(99) Unknown if injured

**BELT USE DETERMINATION**74. Primary Source of Belt Use Determination 1

- (0) Not equipped/not available/destroyed or rendered inoperative  
(1) Vehicle inspection  
(2) Official injury data  
(3) Driver/occupant interview  
(8) Other (specify):  
(9) Unknown if belt used

**NASS CDS OCCUPANT INJURY FORM:**  
**VEHICLE #2 DRIVER**



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

## OCCUPANT INJURY FORM

Form Approved  
O.M.B. No. 2127-0021  
NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number	<u>10</u>	3. Vehicle Number	<u>02</u>
2. Case Number - Stratum	<u>9612</u>	4. Occupant Number	<u>01</u>

### INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

Source of Injury Data	Body Region	A.I.S. - 90						Injury Source	Injury Source Confidence Level	Direct/Indirect Injury	Occupant Area Intrusion Number
		Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect					
<u>Fx</u> <u>Clavicle</u> <u>1st</u>	5. <u>7</u>	6. <u>7</u>	7. <u>5</u>	8. <u>22</u>	9. <u>00</u>	10. <u>2</u>	11. <u>1</u>	12. <u>102</u>	13. <u>3</u>	14. <u>1</u>	15. <u>00</u>
<u>Injury</u> <u>Shoulder, Nfs</u> <u>2nd</u>	16. <u>7</u>	17. <u>7</u>	18. <u>5</u>	19. <u>10</u>	20. <u>99</u>	21. <u>1</u>	22. <u>1</u>	23. <u>102</u>	24. <u>3</u>	25. <u>1</u>	26. <u>00</u>
<u>Laceration</u> <u>forehead</u> <u>3rd</u>	27. <u>7</u>	28. <u>2</u>	29. <u>9</u>	30. <u>06</u>	31. <u>00</u>	32. <u>1</u>	33. <u>7</u>	34. <u>001</u>	35. <u>1</u>	36. <u>1</u>	37. <u>00</u>
<u>Contusion</u> <u>Breast</u> <u>4th</u>	38. <u>7</u>	39. <u>4</u>	40. <u>9</u>	41. <u>04</u>	42. <u>02</u>	43. <u>1</u>	44. <u>1</u>	45. <u>012</u>	46. <u>2</u>	47. <u>1</u>	48. <u>00</u>
<u>Contusion</u> <u>Shoulder</u> <u>5th</u>	49. <u>7</u>	50. <u>7</u>	51. <u>9</u>	52. <u>04</u>	53. <u>02</u>	54. <u>1</u>	55. <u>1</u>	56. <u>102</u>	57. <u>3</u>	58. <u>1</u>	59. <u>00</u>
<u>Laceration</u> <u>Knee</u> <u>6th</u>	60. <u>7</u>	61. <u>8</u>	62. <u>9</u>	63. <u>06</u>	64. <u>00</u>	65. <u>1</u>	66. <u>1</u>	67. <u>012</u>	68. <u>2</u>	69. <u>1</u>	70. <u>00</u>
7th	71. ____	72. ____	73. ____	74. ____	75. ____	76. ____	77. ____	78. ____	79. ____	80. ____	81. ____
8th	82. ____	83. ____	84. ____	85. ____	86. ____	87. ____	88. ____	89. ____	90. ____	91. ____	92. ____
9th	93. ____	94. ____	95. ____	96. ____	97. ____	98. ____	99. ____	100. ____	101. ____	102. ____	103. ____
10th	104. ____	105. ____	106. ____	107. ____	108. ____	109. ____	110. ____	111. ____	112. ____	113. ____	114. ____

## OCCUPANT INJURY DATA

[illegible]